



Attachment to item number 14.1-  
Stormwater Asset Management Plan



# STORMWATER ASSET MANAGEMENT PLAN

---

2022

# Sorell Council – Stormwater Asset Management Plan – 2022

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# Sorell Council – Stormwater Asset Management Plan – 2022

## 1 Executive Summary

The compilation of an Asset Management Plan (AMP) is a process of investigation and review of data from multiple sources, including Council's Engineering and Finance Departments, Works Depot and External Consultants. The first iteration of these asset plans in 2014 identified significant opportunities to improve Council's asset knowledge, documentation, budgeting, construction methodologies and maintenance management.

Since Council's acceptance of the first AMP, improved data collection and field validation using tailored technology, upskilling of staff to undertake field based condition assessment, implementation of a componentised asset register and maintenance management system and integration with Council's finance systems and software have yielded significant improvements in Council's asset management maturity. Council engaged consultants Esk Mapping to complete a detailed survey of the stormwater network including condition assessment. The resulting high quality of underpinning data allowed for the creation of a robust Stormwater System Management Plan (SSMP) developed by Entura.

In addition to the above improvements, Council have engaged specialist asset management consultants Assetic to undertake strategic analysis of our stormwater data and provide Council with an optimised 10 year spending forecast for the period 2022 to 2032. Further detail of this optimised spending is included in Section 6.

### 1.1 Purpose of the Plan

The fundamental purpose of this Stormwater Asset Management Plan is to improve Council's long-term strategic management of its Stormwater Infrastructure assets in order to cater for the community's required levels of service in the future as detailed under Section 3. The plan defines the state of Council's Stormwater assets at the close of the past financial year, the 10-year funding required to achieve Council's adopted asset performance targets and the planned asset management activities over a 10-year planning period.

The Sorell community is continually growing and its forecast growth over the next 25 years is more than 5.7 times the state average. As a result of this growth, Council's services are in high demand along with requests for new facilities, infrastructure and recreational spaces. (Annual Report 2018-19, Mayors Report).

This Plan encompasses a variety of infrastructure assets and therefore the following is a list of the asset categories used within Assetic that make up Council's Stormwater Asset Class.

This Plan encompasses the following infrastructure asset categories:

- Stormwater Drains
- Stormwater Pits
- Stormwater End Structures
- Stormwater Culverts
- Stormwater Gross Pollutant Traps (GPT)
- Stormwater Open Drains and Raingardens

The following two figures demonstrate where this AMP sits amongst other Sorell Council documentation and what elements ideally feed the AMP and what outputs come out of a successfully implemented AMP.

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*Figure 1. Council’s document hierarchy and descriptions of each for which all are published on Council’s website to adhere to the Local Government Act.*

## 1.2 Current State of Council’s Assets

Stormwater assets have a total replacement cost of \$67 million with a written down value of \$49.9 million as of June 30<sup>th</sup> 2022. Table 1 below shows the asset category breakdown for these amounts.

*Table 1. A break up of the asset categories that make up the stormwater asset class and their respective replacement costs, depreciated replacement costs and consumption ratios as of June 30 2022.*

	Asset Category	Gross Replacement Cost (\$)	Accumulated Depreciation (\$)	Fair Value (\$)	Estimated Annual Depreciation (\$)	Fair Value / GRC %
Revalued amount at 30 June 2022	End Structures	361,517	93,263	268,254	4,519	74%
	Open Gardens and Raingardens	1,822,028	303,925	1,518,103	28,977	83%
	Stormwater Culverts	7,512,393	2,994,016	4,518,376	75,124	60%
	Stormwater Drains	45,115,144	11,765,136	33,350,009	451,151	74%
	Stormwater GPT	490,225	71,005	419,220	9,805	86%
	Stormwater Pits	12,503,934	2,631,280	9,872,654	162,653	79%
Total		<b>67,805,242</b>	<b>17,858,625</b>	<b>49,946,617</b>	<b>732,229</b>	<b>74%</b>

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## 1.3 Asset Funding Levels

The forecast lifecycle cost necessary to provide the services covered by this Stormwater Asset Management Plan including maintenance and capital expenditure of assets over a 10 year planning period is demonstrated in table 2 below.

*Table 2. Asset funding Level over a 10-year planning period for Stormwater Assets for Capital Expenditure on Renewal or Replacement of Existing Assets as of June 30<sup>th</sup> 2022.*

Year Ending 30 June:	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
	Year 1 Plan \$'000	Year 2 Plan \$'000	Year 3 Plan \$'000	Year 4 Plan \$'000	Year 5 Plan \$'000	Year 6 Plan \$'000	Year 7 Plan \$'000	Year 8 Plan \$'000	Year 9 Plan \$'000	Year 10 Plan \$'000	Year 11 Plan \$'000	Year 12 Plan \$'000	Year 13 Plan \$'000	Year 14 Plan \$'000
Capital Expenditure on Renewal or Replacement of Existing Assets:														
Stormwater	115	776	795	797	797	797	797	797	797	797	797	797	797	797

### Asset Renewal Funding Ratio:

Based on Current LTFP Budget for High Level of Service 458%  
 Based on Current LTFP Budget for Standard Level of Service 613%  
 Based on Current LTFP Criticality Based 824%

### Asset Consumption Ratios:

Stormwater 74%

### Asset Sustainability Ratio:

Based on Current LTFP Budget for High Level of Service 22%  
 Based on Current LTFP Budget for Standard Level of Service 3%  
 Based on Current LTFP Budget Criticality Based 12%

## 1.4 Action Plan

The next steps to improve asset management practices resulting from this AMP are as follows:

- Inform the Long Term Financial Plan more appropriate renewal budget requirements.
- Communicate as necessary if changes to corporate risk register are required.
- Obtain functionality ratings for all stormwater assets and use this ranking for input into advanced iteration of renewals forecasting.
- Create a schedule for yearly CCTV investigation of stormwater drain network to better understand condition data of underground assets.
- Establish a 6 monthly inspection of major stormwater culverts

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- Further condition assessment of stormwater pits by stormwater works crew to further define renewals program.
- Review all stormwater assets in condition 4 or greater as selected for renewal by the 10 year renewals program.
- Investigate the most cost effective renewal options for larger pipes (eg. slip lining).
- Continue to populate service criteria at the component level as after condition assessments are complete to drive the asset condition / performance curve.

## 2 Current State of Council's Assets

### 2.1 Key Indicators

The Stormwater Asset Class is comprised of a variety of different assets that make up 6 asset categories. The following table provides the quantum of Transport assets by asset category managed by Council as at 30<sup>th</sup> June 2022.

**Table 3. A Summary of Stormwater Assets managed by Council as at 30<sup>th</sup> of June 2022.**

Transport Categories	Measure	Additional Information	
Stormwater Drains	95 Km	<b>Asset Sub Type</b>	<b>(Qty)</b>
		Gravity Main	3726
		Customer Connection	1315
Stormwater Pits	2,894 Qty	<b>Asset Sub Type</b>	<b>(Qty)</b>
		Manhole	1324
		Pit	1570
Stormwater End Structures	441 Qty		
Stormwater Culverts	1,169 Qty		
Stormwater Gross Pollutant Traps	20 Qty		
Stormwater Open Drains and Rain Gardens	57 Qty	<b>Asset Type</b>	<b>(Qty)</b>
		Open Drains	39
		Rain Gardens	18

The Current State of Council's Stormwater Assets can be demonstrated through an assets Overall Service Index (OSI). **Table 4** provides the high level OSI of Council's Stormwater assets. This was derived from the valuation index at the component level. The distribution percentage is as per current quantity of the assets where condition data is available. The current condition of the assets has been used in predictive modelling to determine the required funding levels for asset renewal and maintenance. The detail of funding level options detailed in Section 6 Asset Funding Levels.



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**Table 4. A Summary of the percent of the valuation index at each valuation index grouping**

Asset Class	Condition Rating Date	New	Very Good	Good	Fair	Poor	Very Poor / EoL
		0-1	1-2	2-3	3-4	4-5	5-6
Stormwater Drains	Jun-17	15%	14%	48%	21%	1%	1%
Stormwater Pits	Jun-17	15%	23%	42%	13%	5%	1%
Stormwater End Structures	Jun-17	13%	10%	48%	19%	7%	3%
Stormwater Culverts	Jun-17	6%	3%	21%	66%	3%	1%
Stormwater GPTs	Jun-17	39%	56%	0%	6%	0%	0%
Stormwater Open Drains and Rain Gardens	Jun-17	32%	11%	53%	4%	0%	0%

**Table 5** below demonstrates the asset consumption ratio per Stormwater Asset Category.

**Table 5. Asset consumption ratio per Stormwater Asset Category (Total Depreciated Replacement Cost / Total Replacement Cost)**

Asset Category	Total Replacement Cost	Total Depreciated Replacement Cost	Asset Consumption Ratio
Culverts	7,512,393	4,518,376	60%
Open Drains and Rain Gardens	1,822,028	1,518,103	83%
Stormwater Drains	45,115,144	33,350,009	74%
Stormwater End Structures	361,517	268,254	74%
Stormwater GPTs	490,225	419,220	86%
Stormwater Pits	12,503,934	9,872,654	79%
Grand Total	67,805,242	49,946,617	74%

## 2.2 Asset Class Status

The following collection of pie charts demonstrate the overall condition status for each of the asset categories included in this plan. The condition score was derived from a condition assessment of all above ground assets. For Stormwater Drains a condition score was derived from the age of overlying road. A

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score of between 0-6 was used as the rating system at the time the data was collected. (0 being brand new and 6 being End of Life, a full description can be found in Table 14 in section 3.5 Condition Assessment Framework).

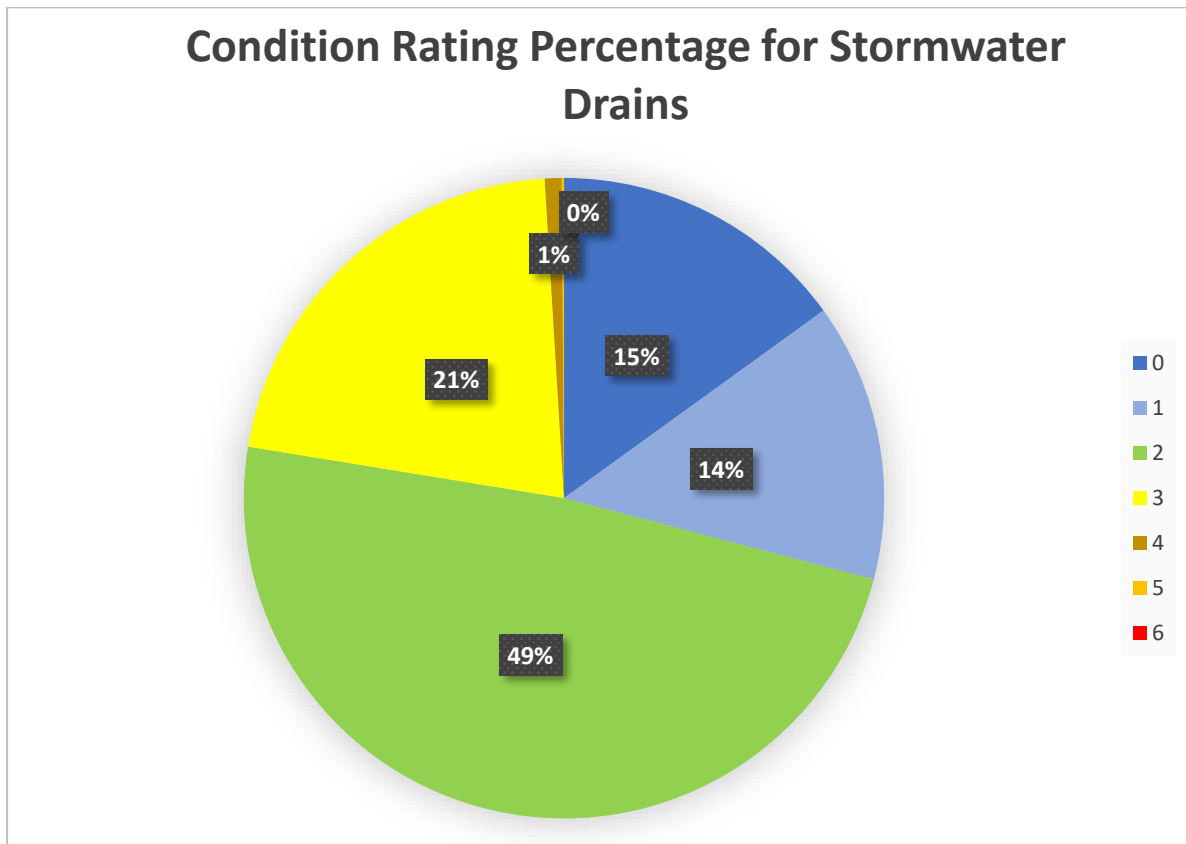


Figure 2. Current Overall Service Indicator (OSI) of Stormwater Drains as of 30 June 2022 by Asset quantity.

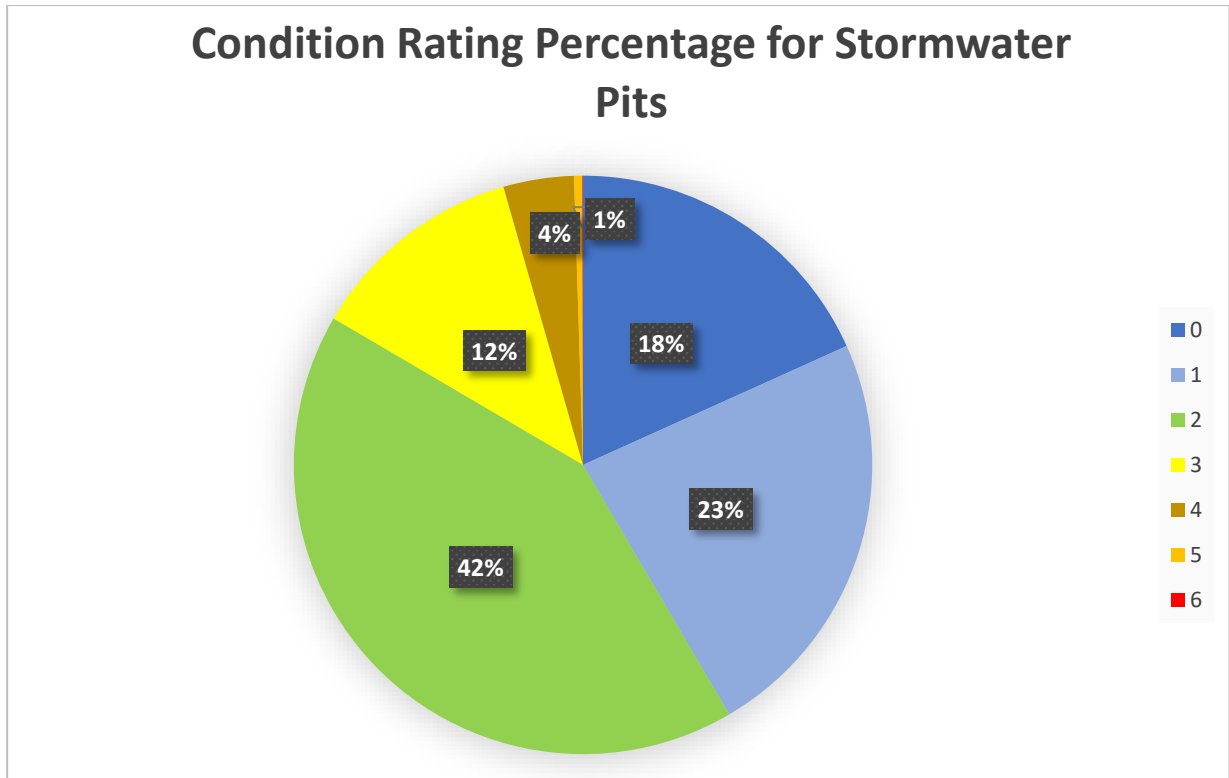


Figure 3. Current Overall Service Indicator (OSI) of Stormwater Pits as of 30 June 2022 by Asset quantity.

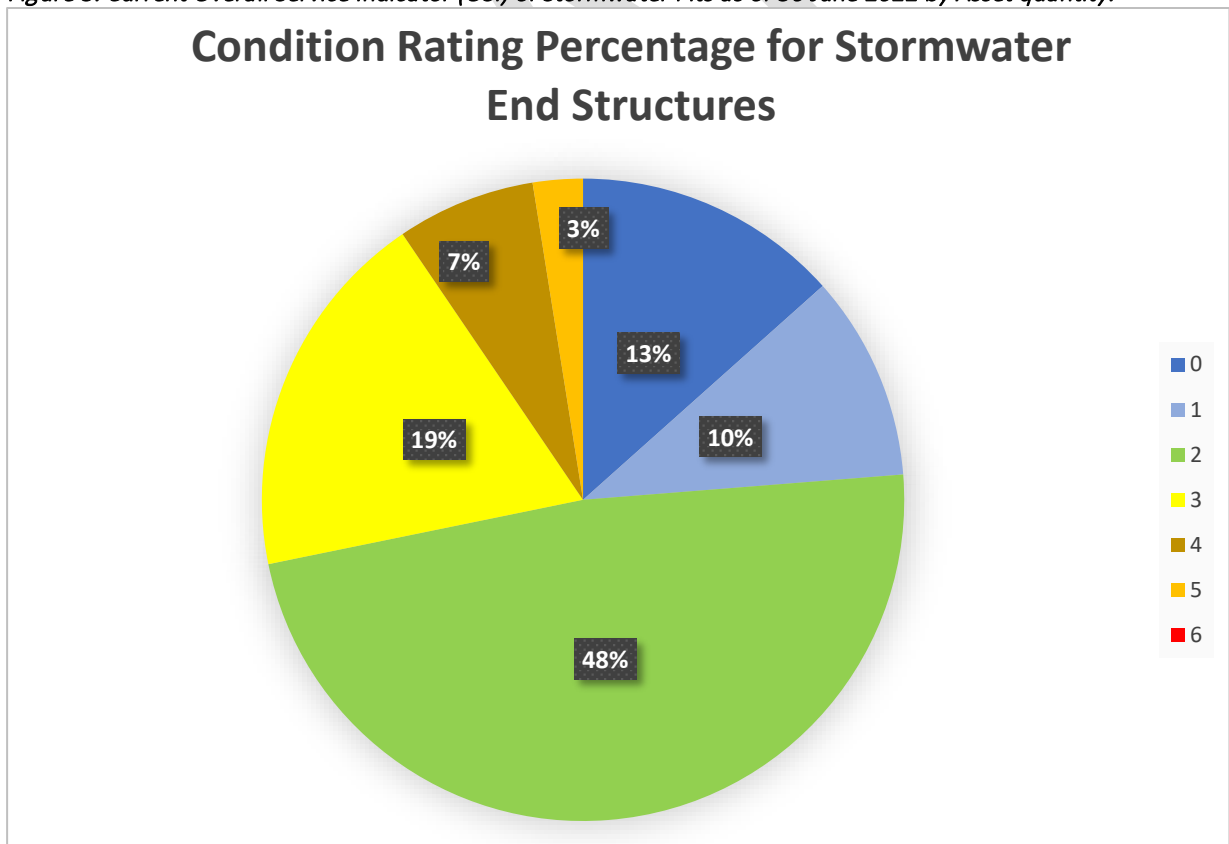


Figure 4. Current Overall Service Indicator (OSI) of Stormwater End Structures as of 30 June 2022 by Asset quantity.

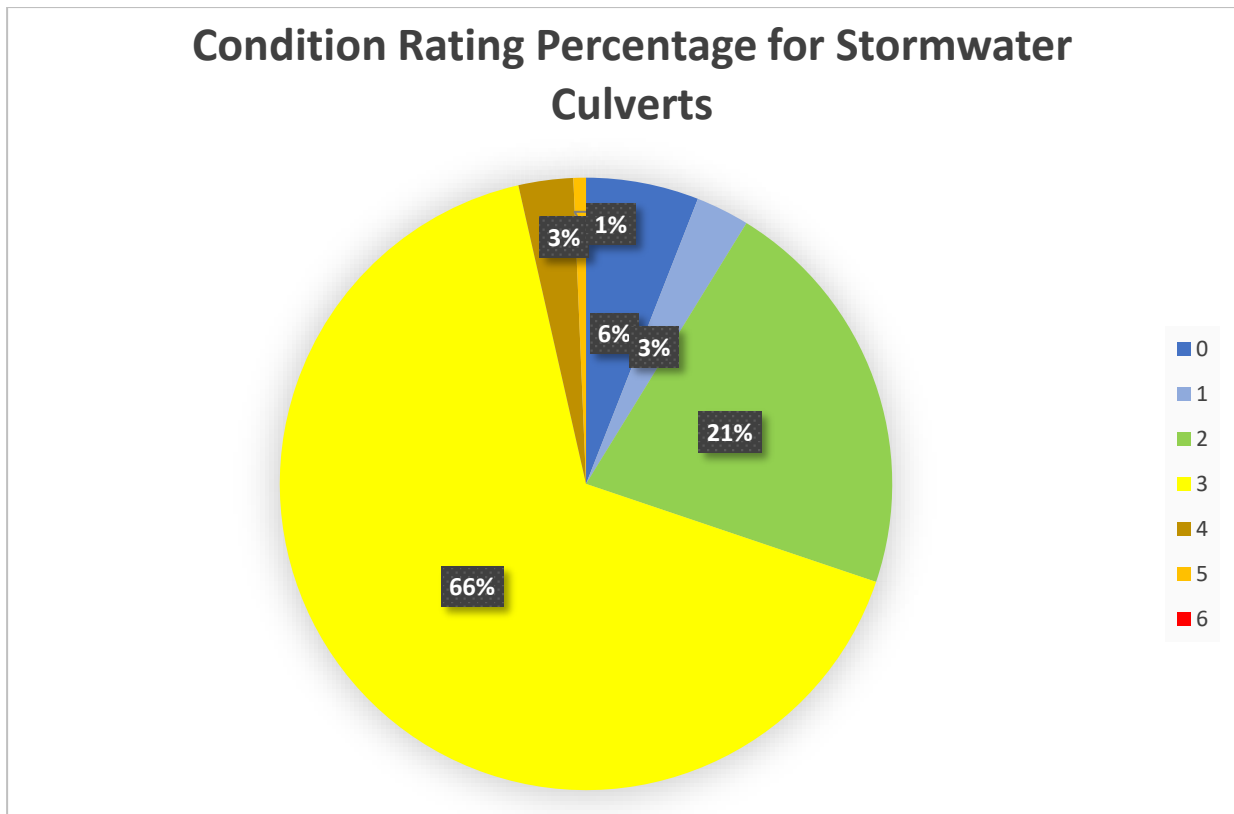


Figure 5. Current Overall Service Indicator (OSI) of Stormwater Culverts as of 30 June 2022 by Asset quantity.

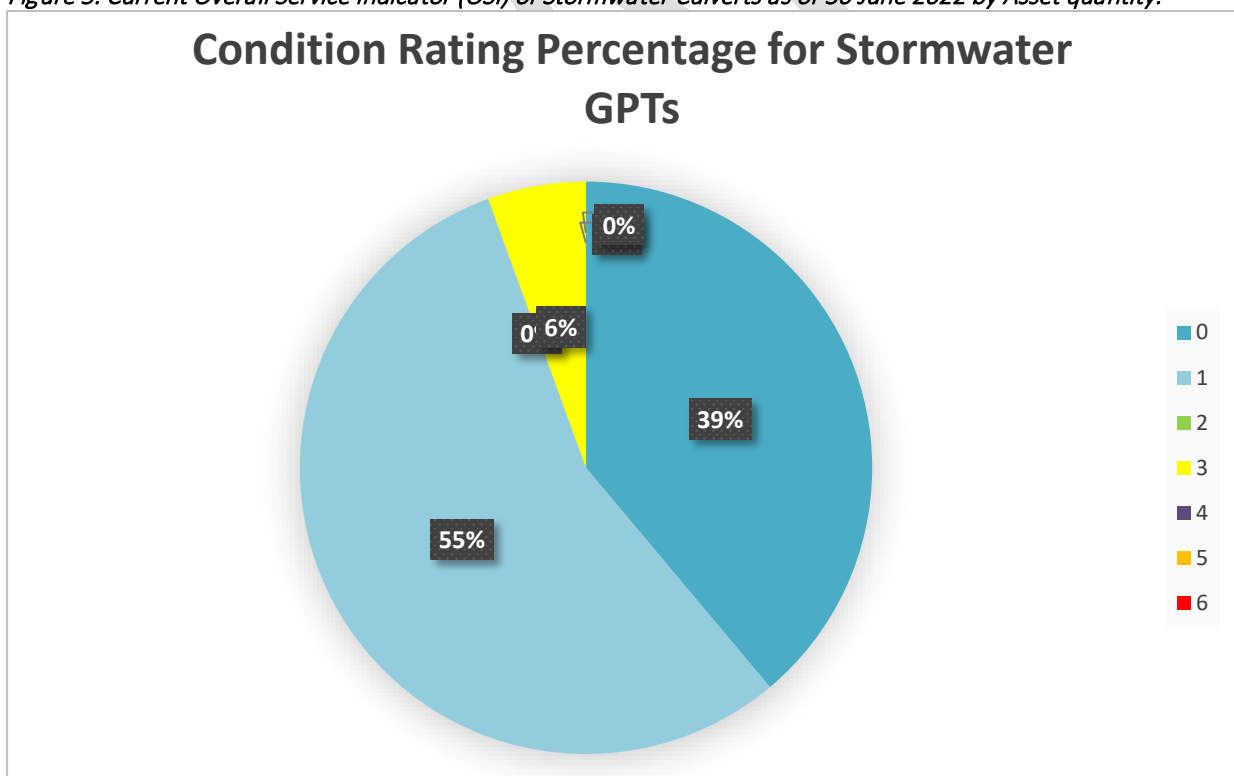
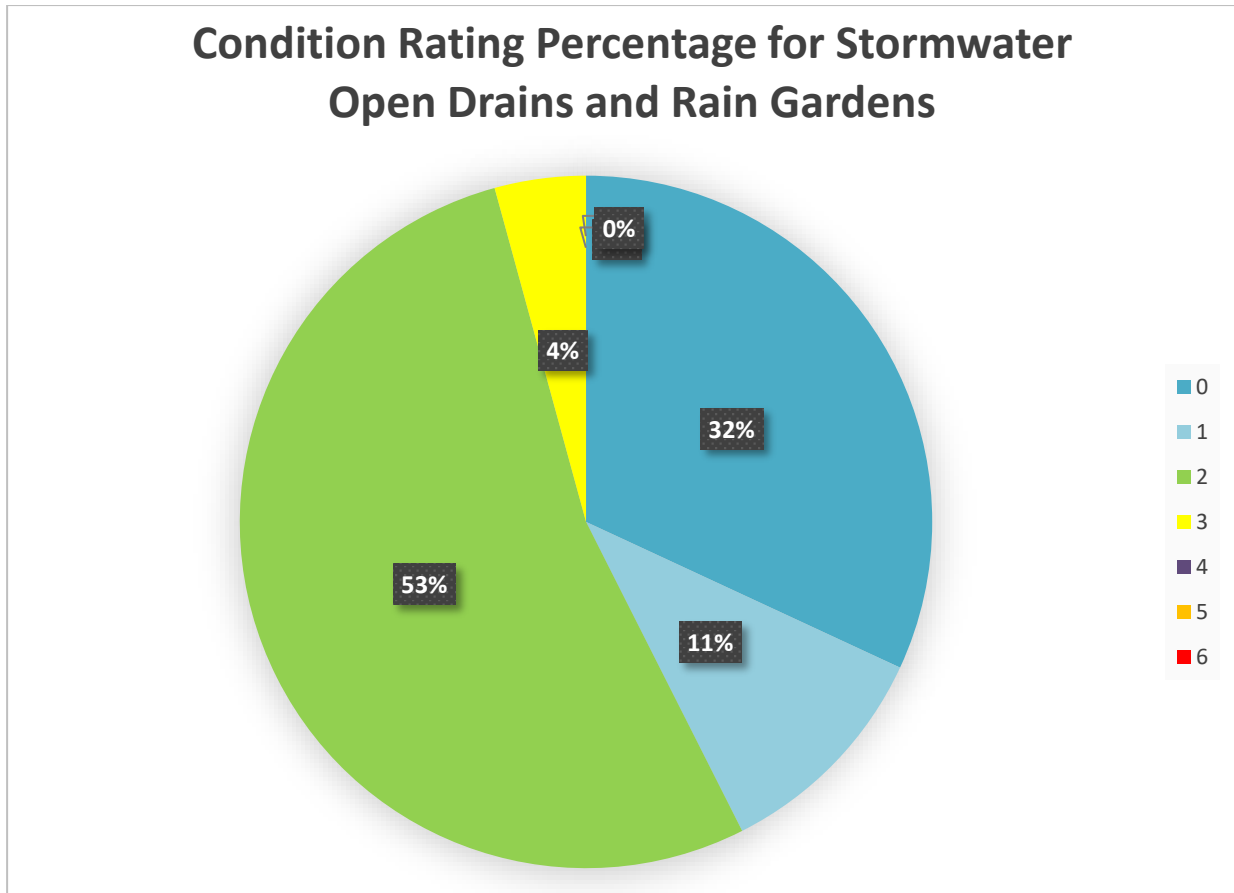


Figure 6. Current Overall Service Indicator (OSI) of Stormwater GPTs as of 30 June 2022 by Asset quantity.



*Figure 7. Current Overall Service Indicator (OSI) of Stormwater Open Drains and Rain Gardens as of 30 June 2022 by Asset quantity.*

*Note: Stormwater Condition of 0 is predominately derived from gifted assets from 2017 to now. Further information on condition frameworks is described in Section 3.5.*

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## 3 Levels of Service and Condition Assessment

### 3.1 Strategic Level of Service

This AM Plan is prepared under the direction of Sorell Council’s vision, mission, goals and objectives.

**Our vision is:**

A proud, thriving and inclusive South East Community.

**Our mission is:**

To facilitate a vibrant, sustainable and liveable South East Region.

Strategic goals have been set by Sorell Council. The relevant goals and objectives and how these are addressed in this AM Plan are summarised in Table 6. These strategic goals link directly to Councils Strategic Plan 2019-2029 and can be found on Councils website.

**Table 6. Goals and how these are addressed in this Plan**

Goal	Objective	How Goal and Objectives are addressed in the AM Plan
Provide safe and reliable stormwater drainage assets	Construct and maintain stormwater infrastructure to appropriate standards	Regular proactive inspection and maintenance of asset condition. Ensure constructed and acquired assets meet design standards and future demands. Upgrade capacity issues on a priority basis.
Improved risk management	Identify and address all high level risks and critical assets	Implement a structured approach to manage risks and critical stormwater assets (Section 6).
Long term Financial Sustainability	Responsible stewardship and a sustainable asset management for the organisation	Completion and adoption of a credible AMP which identifies required expenditure and a 10 year renewal program which details how it will be spent as well as continuous improvements to the maintenance program.

There are many legislative requirements relating to the management of assets. Legislative requirements that impact the delivery of the Stormwater service are outlined in Table 7.

**Table 7. Legislative Requirements**

Legislation	Requirement
Local Government Act	Sets out the responsibilities and requirements of local government, including the adoption of long term financial plan supported by asset management plans to ensure sustainable levels of service.
Environmental Protection Act	Sets out the requirements of environmental protection.
Urban Drainage Act 2013	Outlines the requirements and obligations of Council’s provision of stormwater services.

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Plumbing Regulations 2014, Buildings Regulations 2014 and Buildings Act 2016	Outlines Building and Plumbing Regulations
Pitt Water Nature Reserve Management Plan 2013	Outlines the legislative management objectives for the Pitt Water Nature Reserve, including the improvement of water quality, particularly in Orielton Lagoon through better stormwater management.
Sorell Council Stormwater in New Developments Interim Policy 2022 (DRAFT)	Sets out requirements for how stormwater is managed in new developments in response to changes in the planning system.

## 3.2 Customer Values

Service levels are defined in three ways, customer values, customer levels of service and technical levels of service.

**Customer Values indicate:**

- What aspects of the service is important to the customer.
- Whether they see value in what is currently provided and
- The likely trend over time based on the current budget provision.

**Table 8. Customer Values**

Service Objective:			
Customer Values	Customer Satisfaction Measure	Current Feedback	Expected Trend Based on Planned Budget
No Blocked pits / localized flooding	Number of Complaints / Customer Relation Management (CRMs)	Periodic calls / CRMs generally during periods of heavy rainfall.	Expected to stay the same or increase
No Pollution of waterways / RAMSAR areas	Number of Complaints / CRMs	Number of Complaints / CRMs	Expected to decrease due to stricter regulations
Accurate and up to date flood modelling	Number of Complaints / CRMs	General complaints that property is within flood zone	Expected to stay the same
Clean / unblocked open drains	Number of Complaints / CRMs	Periodic calls / CRMs generally during periods of heavy rainfall.	Expected to stay the same or increase

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## 3.3 Customer Levels of Service

The Customer Levels of Service are considered in terms of:

**Condition** How good the service is... what is the condition or quality of the service?

**Function** Is it suitable for its intended purpose .... Is it the right service?

**Capacity/Use** Is the service over or under used ... do we need more or less of these assets?

In Table 9 under each of the service measures types (Condition, Function, Capacity/Use) there is a summary of the performance measure being used, the current performance, and the expected performance based on the current budget allocation.


These are measures of fact related to the service delivery outcome e.g. number of occasions when a service is not available or proportion of replacement value by condition percentage provides a balance in comparison to the customer perception that may be more subjective.

*Table 9. Customer Level of Service Measure Type*

DRAFT



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Type of Measure	Level of Service	Performance Measure	Current Performance	Expected Trend Based on Planned Budget
<b>Condition</b>	Condition of Stormwater Pits	Stormwater Pit Condition Assessment	 <p>■ Good ■ Fair ■ Poor</p> <p>Currently based on an extensive pit condition assessment in 2017 most pits were found to be in fair to good condition.</p> <p>Stormwater drain condition is largely unknown</p>	Condition expected to stay the same or decrease based on planned budget
	<i>Confidence levels</i>		<p>High (Professional Judgement supported by extensive data)</p> <p>Low for Stormwater drains</p>	Medium (Professional judgement supported by data sampling)
<b>Function</b>	Water quality discharged from the Stormwater Network	Gross Pollutant Trap / WSUD Installation and Maintenance	<p>GPTs cleaned / emptied yearly</p> <p>No water quality monitoring program for outfalls in place</p>	To increase based on development regulations
	<i>Confidence levels</i>		Medium (Professional judgement supported by data sampling)	Medium (Professional judgement supported by data sampling)
<b>Capacity</b>	Capacity of Stormwater pipe network	Percentage of pipes full given a flood event	>50% of network not full at 100 AEP Event	To increase based on planned budget and development regulations

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	<i>Confidence levels</i>		High (Professional Judgement supported by extensive data)	High (Professional Judgement supported by extensive data)
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## 3.4 Operational / Technical Level of Service

**Technical Levels of Service** – To deliver the customer values, and impact the achieved Customer Levels of Service, are operational or technical measures of performance. These technical measures relate to the activities and allocation of resources to best achieve the desired customer outcomes and demonstrate effective performance.

Technical service measures are linked to the activities and annual budgets covering:

- **Acquisition** – the activities to provide a higher level of service (e.g. widening a road, sealing an unsealed road, replacing a pipeline with a larger size) or a new service that did not exist previously (e.g. a new library).
- **Operation** – the regular activities to provide services (e.g. opening hours, cleansing, mowing grass, energy, inspections, etc).
- **Maintenance** – the activities necessary to retain an asset as near as practicable to an appropriate service condition. Maintenance activities enable an asset to provide service for its planned life (e.g. road patching, unsealed road grading, building and structure repairs).
- **Renewal** – the activities that return the service capability of an asset up to that which it had originally provided (e.g. road resurfacing and pavement reconstruction, pipe replacement and building component replacement).

Service and asset managers plan, implement and control technical service levels to influence the service outcomes.<sup>1</sup>

Table 10 shows the activities expected to be provided under the current 10-year Planned Budget allocation, and the Forecast activity requirements being recommended in this AM Plan.

*Table 10. Technical Levels of Service*

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
<b>TECHNICAL LEVELS OF SERVICE</b>				
<b>Acquisition</b>	Reduction in pollutants from stormwater runoff.	Number of Complaints / CRMs related to pollution of	Water Sensitive Urban Design (WSUD) installations included with development where	All developments include, or contribute to, WSUD installations to reduce runoff and pollutants e.g.

<sup>1</sup> IPWEA, 2015, IIMM, p 2|28.

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Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
		waterways & Water Testing	extent of impervious pavement exceeds 500m <sup>2</sup>	installation of rainwater tanks, bio-retention swale drains and GPTs
	Reduction in volume of stormwater runoff from new developments	Update the Stormwater flood model to show impact from new development	Any planned developments where extent of impervious pavement exceeds 500m <sup>2</sup> will need to update the stormwater flood model to ensure the development will not add to flooding issues.	All planned developments will need to update the stormwater flood model to ensure the development will not add to flooding issues.
	New / Upgrade of Stormwater infrastructure identified as being under capacity by the SSMP	Identified as High Priority Potential Flooding Area in the Stormwater System Management Plan	Planned renewal / upgrade of all High Priority Potential Flooding Areas	Planned renewal / upgrade of all High & Medium Priority Potential Flooding Areas
		<b>Budget</b>	<i>\$410,000</i>	<i>\$800,000</i>
<b>Operation</b>	Inspection and silt / debris removal from Stormwater Pits	Number of Complaints / CRMs related to localized flooding or Pit Blockages	Planned and Reactive Inspection and Cleaning of Stormwater Pits	Programmed cleaning of Critical Stormwater Pits before forecast major rain event
	Street Sweeping to remove extra debris from entering	Number of Complaints / CRMs related to localized flooding or Pit Blockages	6 weekly street sweeping program	Fortnightly street sweeping program

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Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
	stormwater pits			
	Emptying Trash Racks and silt removal from GPT's	Number of Complaints / CRMs related to pollution of waterways & Water Testing	GPTs inspected yearly and cleaned / emptied as required	GPTs inspected on a 6 monthly schedule and cleaned / emptied as required
	Clearing waterways and open drains of debris and vegetation	Number of Complaints / CRMs related to blocked / overgrown open drains	As required cleaning of waterways and open drains	Programmed cleaning of waterways and open drains
	Routine maintenance to all Raingardens and Bio-Retention devices	Number of Complaints / CRMs related to blocked / overgrown raingardens	As required cleaning of waterways and open drains	Programmed cleaning of Raingardens and Bio-Retention devices
		<b>Budget</b>	\$495,000	\$900,000
<b>Maintenance</b>	Replacement of rusted / damaged stormwater pit grates	Number of Complaints / CRMs related to blocked / damaged pit grates	Yearly pit lid replacement program for lids reported rusted / damaged by inspection	Replacement of all old style steel pit grates
		<b>Budget</b>	\$115,000	\$250,000
<b>Renewal</b>	Renewal of stormwater pits in poor condition	Number of Complaints / CRMs related to	Planned renewal of selection of poor condition pits yearly	Renewal of all poor condition pits

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Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
		damaged stormwater pits		
	Renewal of stormwater outfalls in poor condition	Number of Complaints / CRMs related to damaged stormwater outfalls	Planned renewal of selection of poor condition outfalls yearly	Renewal of all poor condition outfalls
		<b>Budget</b>	\$115,000	\$330,000
<b>Disposal</b>	Disposal of assets no longer in service	Currently no performance measures		
		<b>Budget</b>	\$0 – No disposals planned	\$0 – No disposals planned

Note: \* Current activities related to Planned Budget.

\*\* Expected performance related to forecast lifecycle costs.

It is important to monitor the service levels regularly as circumstances can and do change. Current performance is based on existing resource provision and work efficiencies. It is acknowledged changing circumstances such as technology and customer priorities will change over time.

In addition to the above tables summarising the lifecycle activities, Sorell Council has adopted Assetic’s operational and tactical maintenance workflows across all asset classes recognised in Assetic. Below is a diagram of these 2 work flows and how they relate to each other.

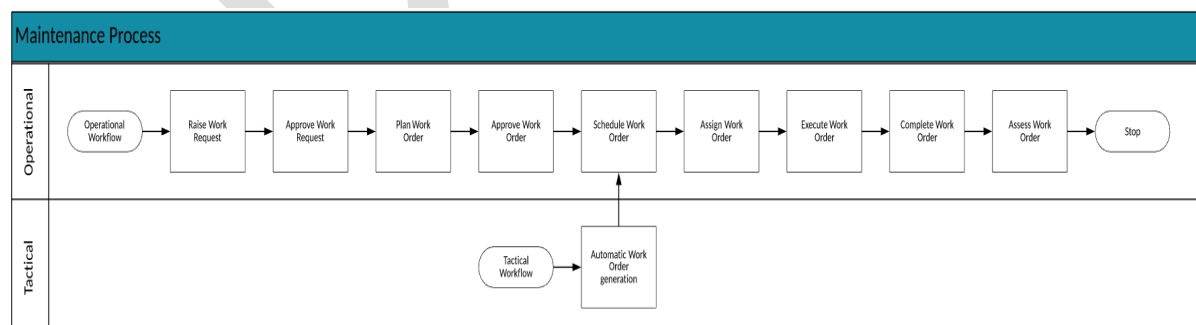


Figure 8. Assetic Maintenance Workflows (ref: Sorell SCADMS document by Assetic, page 30).

Operational maintenance workflow is primarily used for the non-repeatable work that can be planned and scheduled. Whereas the tactical workflow is used as the preventative maintenance strategy and the

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work as prior approval by management including funding, number of treatments and their frequency. This allows for high confidence in maintaining the acceptable asset condition throughout its life. An overview of Councils adopted technical maintenance levels of service and response times are outlined below in Table 11.

**Table 11. Stormwater Response Times**

Priority Code	Priority Description	Response Time (hr)
1	Urgent (Today)	24
2	Important (6 Weeks)	1008
3	Required (16 Weeks)	2688
4	Maintenance (26 Weeks)	4368
5	Monitor (52 Weeks)	8736

In addition to dedicated response times Council have customised its Failure, Cause and Remedy categorisations within the maintenance module of Assetic. The following tables demonstrates the details the types of Failure, Cause and Remedy codes.

Failure items are only available for those work orders related to corrective maintenance and I much like a defect checklist. The full list of failure codes for stormwater can be found in Table 12.

**Table 12. Stormwater FCR Failure Items (source SCADMS document Table 39 prepared by Assetic 2018)**

Failure Code	Failure Notation	Sub Failure Code	Sub Failure Notation
1	Failure Types	1	Blockage
		2	Breakage
		3	Debris
		4	Erosion
		5	Other
		6	Vegetation

Cause Code	Cause Notation	Sub Cause Code	Sub Cause Notation
01	Cause of Failure	01	Asset Age
		02	Blockage
		03	Faulty Element
		04	General Wear & Tear
		05	Other
		06	Vandalism
		07	Vehicle Damage
		08	Weather Event

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## 3.4.1 Remedy

Remedy items are a new concept in the Assetic Maintenance and available for selection on any type of Work Order raised in the Plan area. They are similar to Work Activities in myData, but are used more so as a summary of the work to be performed (any Tasks, Crafts and Service Activities assigned to the Work Order will define the activity more specifically).

The Remedy items configured in Assetic’s default FCR Categorisation were used as a starting point and then simplified for use across all custom FCR Categorisations. SC may add or remove Remedy items from these lists as required. Remedy items can also have an optional description and example entered for each, which SC may wish to populate (e.g. a remedy of ‘Repair’ on a stormwater pit might have a description of “Damaged grated stormwater pit” and an example of “Replace grate and repair concrete surrounds”).

*Table 13. FCR Remedy items*

Remedy Code	Activity	Remedy Use
01	Repair	Corrective
02	Replace	Corrective & Preventative
03	Inspect	Corrective & Preventative
04	Modify	Corrective & Preventative
05	Monitor	Corrective & Preventative
06	Other	Corrective & Preventative

## 3.5 Condition Assessment Framework

The condition of Council’s aboveground stormwater infrastructure was assessed in 2017 as part of the Stormwater Network Data collection survey. The condition rating was based on a 0-6 rating scale obtained from Assetic. The condition survey has allowed for a more strategic maintenance program, capital budgeting and further scheduling of stormwater asset renewals and or upgrades.

### 3.5.1 Stormwater Condition Framework

*Table 14. Condition Rating Scale and respective description used in Stormwater data collection.*

Condition Grading	Description of Condition	Remaining Life
0	<b>New:</b> Asset in new or near new condition	100% to 95% Useful life remaining
1	<b>Very Good:</b> No Defects	95% to 80% Useful life remaining
2	<b>Good:</b> Minor defects. Only planned maintenance required	80% to 60% Useful life remaining
3	<b>Fair:</b> Some Defects. Minor maintenance required plus planned maintenance	60% to 40% Useful life remaining
4	<b>Poor:</b> Plan for renewal. Significant maintenance required	40% to 20% Useful life remaining
5	<b>Very Poor:</b> Significant renewal/rehabilitation required	20% to 5% Useful life remaining
6	<b>End of Life:</b> No remaining service potential	5% to 0% Useful life remaining

Condition of the stormwater pipe network has been estimated based off the age of the adjacent road and the condition of adjoining pits. To better understand the actual condition of the stormwater pipe network, Sorell Council has planned to use CCTV survey to obtain actual condition data on our underground stormwater assets. The CCTV survey provides pipe defects which and a Water Services Association Australia (WSAA) Structural Mean Score for each pipe. This is converted into a condition grading using Table 15.

# Sorell Council – Stormwater Asset Management Plan – 2022

*Table 15. WSAA Score Condition Rating*

Condition	Rating	Rating Description	WSAA Structural Mean Score
1	Very Good	Pipe shows no indication of distress or deterioration. Sound construction. No or insignificant loss of hydraulic capacity. Defects present, may include those typically caused from fabrication or construction.	0-0.5
2	Good	Minor deterioration of the pipe has occurred. Minor defects are present. No immediate action required— Standard programmed condition assessment.	>0.5-1.0
3	Fair	Moderate deterioration of the pipe has occurred. Developed defects are present but not affecting short-term structural integrity. Monitor with programmed condition assessment for rehabilitation and/or renewal in medium term.	>1.0-2.0
4	Poor	Serious deterioration of the pipe has occurred. Significant defects are present and potentially affecting structural integrity. Immediately undertake risk assessment and As appropriate to outcomes of above, schedule appropriate action, which may include rehabilitation and/or renewal within 2-10 years. Further investigate as required.	>2.0-5.0
5	Very Poor	Extensive defects are present and potentially affecting structural integrity. Immediately undertake risk assessment and further investigation, and, take appropriate action, which may include immediate rehabilitation and/or renewal immediately or within 12 months.	>5

### 3.5.2 Performance Indicators

The National State of the Assets 2018 report cites that the infrastructure performance is currently and consistently measured using 3 main indicators outlined in table x below.

*Table 16. Infrastructure Performance Indicators*

Indicator	What's Measured	
Condition	How good is the service?	What is the condition or quality of the service
Function	Is the service suitable for its intended purpose?	Is it the right service?
Capacity / Utilisation	Is the service under or over utilised?	Do we need more or less of these assets?



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A Capacity rating was assigned to each pipe using data from the Stormwater System Management Plan produced by Entura. The capacity value was based off the Annual Exceedance Probability (AEP) event at which the pipe becomes full or reaches capacity.

**Table 17. AEP Capacity Rating**

AEP at which Pipe is at Capacity	Entura Capacity Rating	Assetic Capacity Score
100	1	5
50	2	4
20	5	3
10	10	3
5	20	2
2	50	2
1	100	1
> 1%	999	1

In order to drive response time to a stormwater work order and determine inspection frequency a criticality rating was calculated. Factors used to determine criticality for stormwater infrastructure are described in Table 18 below.

**Table 18. Criticality Rating Table and suggested Inspection Frequency**

Description	Criticality Rating	Inspection Frequency
<p>These are SWD Systems where failure is the most disruptive and expensive to the community. They should be subject to more frequent and rigorous inspection activities.</p> <p>The following are examples of such criticality:</p> <ul style="list-style-type: none"> <li>• SWD systems under major buildings or major structures</li> <li>• SWD systems servicing the Sorell CBD precinct</li> <li>• SWD systems providing draining to arterial transport network</li> <li>• SWD systems comprising pipes of &gt;1200mm diameter</li> <li>• SWD systems within high risk flood areas</li> </ul>	High	Quarterly and before a predicted major storm event
<p>These are SWD Systems where failure is likely to be less disruptive but still of significant to the affected community. They should be subject to more frequent and rigorous inspection activities.</p> <p>The following are examples of such criticality:</p> <ul style="list-style-type: none"> <li>• SWD systems providing drainage to collector road network</li> <li>• SWD systems comprising pipes of &gt;375mm diameter</li> </ul>	Medium	Yearly
<p>These are SWD Systems where failure is likely to be of low significance in terms of disruption to the affected community. They require less frequent inspection however, such should still drive proactive maintenance and remedial action.</p> <p>The following are examples of such criticality:</p>	Low	Every 2 Years

## Sorell Council – Stormwater Asset Management Plan – 2022

<ul style="list-style-type: none"><li>• SWD systems providing drainage to low density urban development</li><li>• SWD systems providing drainage to local access road network.</li></ul>		
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A series of maps showing the spatial distribution of Council’s stormwater infrastructure by criticality ranking can be seen in Appendix C.

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## 4 Key Achievements and Practices

### 4.1 AM Achievements

The greatest achievements since 2014/15 stormwater AMP have been:

- Robust Stormwater System Management Plan with prioritisation of flood mitigation improvements and completion or secured funding of 6 of 9 high and medium risk improvements to date.
- High quality of underpinning data including full survey of stormwater infrastructure including condition assessment and location / invert levels with a +/- 3cm accuracy to allow for flood modelling analysis.
- The migration and implementation of Council’s asset data to Assetic’s cloud based asset register. This has allowed for customisation and deployment of field based service activities. Particular focus on the corrective and preventive maintenance program was made in order to rebalance preventative versus reactive maintenance.
- Council have also integrated Assetic and Navision (finance system) for the last 3 years whereby actual activity based costings are being attributed back to the asset / component and therefore data is now available to support how much it costs the organisation to undertake work at a capital and operational level based on failure type and locality.
- 2022 Independent revaluation of the stormwater asset class by Assetic.
- Created Assetic Predictor model to develop a 10 year renewal program for stormwater assets.
- CCTV survey of 1% of piped stormwater network to further refine condition assessment.
- Development of criticality rating for stormwater infrastructure to determine maintenance response time and inspection frequency.
- Use of Assetic inspection maintenance routing tool to inspect stormwater assets.
- Successful in securing \$1.7M in funding for stormwater projects under the National Flood Mitigation Infrastructure Program 2021-22.
- Capturing actual maintenance cost against stormwater assets using Assetic’s Maintenance Module.
- Successful in securing \$1.8M in funding for stormwater outfall renewal and upgrade through the Coastal and Estuarine Risk Mitigation Program.

### 4.2 AM Practice

#### 4.2.1 Componentisation

Stormwater asset types consist of one “Main” component except for stormwater culverts, which consist of two components - a “Main” pipe component and a “Headwall” component.

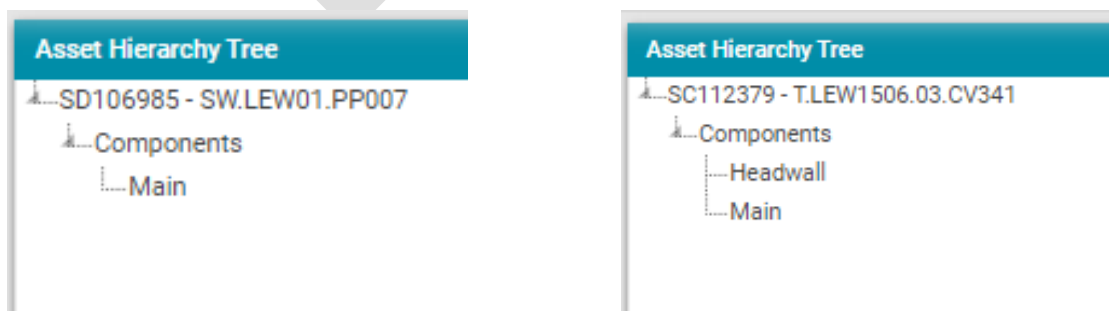


Figure 9. Showing stormwater pipe components (left) and stormwater culvert components (right).

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## 4.2.2 Strategic AM Maintenance Practices – Stormwater

Stormwater maintenance is divided into two strategies: Periodic maintenance carried out annually and a cyclic routine maintenance program undertaken monthly. Stormwater infrastructure is inspected using the Assetic Routing tool. The Assetic routing tool allows for quick and easy creation of work orders while completing an inspection route. Critical stormwater infrastructure inspections are scheduled quarterly and before a major flood event. Stormwater GPT’s are inspected 6 monthly and emptied as required.

*Table 19. Previous and future Maintenance Budgets*

Year	Maintenance Budget \$
2021/22	\$90,000
2022/23	\$115,000
2023/24	\$
2024/25	\$

Using Assetic’s Maintenance module Council have also been able to capture actual maintenance cost against stormwater assets. This has allowed for maintenance costing analysis and more accurate asset lifecycle costing. This data allowed for a recent maintenance cost condition analysis review to be carried out, which showed a strong correlation between deteriorating condition and increase in maintenance cost for stormwater assets (Figure 10).



*Figure 10 Maintenance Work Order Cost by Condition Rating*

# Sorell Council – Stormwater Asset Management Plan – 2022

## 5 Demand Management / Risk Management

### 5.1 Demand Drivers

Drivers affecting demand include things such as population change, regulations, changes in demographics, seasonal factors, vehicle ownership rates, consumer preferences and expectations, technological changes, economic factors, agricultural practices, environmental awareness, etc.

### 5.2 Demand Forecasts

The present position and projections for demand drivers that may impact future service delivery and use of assets have been identified and documented.

### 5.3 Demand Management Plan / Current Controls

The impact of demand drivers that may affect future service delivery and use of assets are shown in Table 4.3.

Demand for new services will be managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management. Demand management practices can include non-asset solutions, insuring against risks and managing failures.

Opportunities identified to date for demand management are shown in Table 20. Further opportunities will be developed in future revisions of this AM Plan.

*Table 20. Demand Management Plan*

Demand driver	Current position	Projection	Impact on services	Demand Management Plan
Increased Population	Population now is 15,709 (2020; Treasury Dept. Tas).	19,278 (2039; Treasury Dept. Tas).	Increased housing and increased pressure / demand on stormwater network	Head water charge for new developments to raise money to upgrade the stormwater network to cope with growing demand.
Increased residential and low-density residential developments	Currently about 100 residential blocks and 10 LDR blocks developed per year	Based on population growth this could reach 150 residential blocks and 15 LDR blocks per year	Increasing development will result in more GPT and WSUD assets for Council to Maintain	Ensure GPT and WSUD Assets created meet design standards and are easy to maintain and empty.
Legislation - Water Sensitive Urban Design (WSUD) initiatives	The State government guidelines are currently discretionally used	Initiatives may be legislated in future years	Increased expenditure in maintenance and capital works	Increase planned budget for capital works and maintenance

### 5.4 Asset Programs to Meet Demand

The new assets required to meet demand may be acquired, donated or constructed. Additional assets are discussed in Section 5.4.

# Sorell Council – Stormwater Asset Management Plan – 2022

Acquiring new assets will commit Council to ongoing operations, maintenance and renewal costs for the period that the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operations, maintenance and renewal costs for inclusion in the long-term financial plan (Refer to Section 5).

## 5.5 Climate Change Adaptation

The impacts of climate change may have a significant impact on the assets we manage and the services they provide. In the context of the Asset Management Planning process climate change can be considered as both a future demand and a risk.

How climate change impacts on assets will vary depending on the location and the type of services provided, as will the way in which we respond and manage those impacts.<sup>2</sup>

As a minimum we consider how to manage our existing assets given potential climate change impacts for our region.

Risk and opportunities identified to date are shown in Table 21.

**Table 21. Managing the Impact of Climate Change on Assets and Services**

Climate Change Description	Projected Change	Potential Impact on Assets and Services	Management
Increased storm intensity	More frequent short, high intensity rainfall events	Increased localised flooding	More frequent Pit inspections and cleaning. Proactive inspections scheduled before a major rainfall event.
Sea level rise and Coastal Inundation	Higher Tides and erosion along coastal areas	Damage to Outfalls along coastal areas, backup of stormwater network during high tides	New stormwater infrastructure along coastal areas should be designed to withstand sea level rise.
Increased drought periods	Longer dry periods of little to no rainfall	Stormwater asset maintenance and renewal can be neglected during dry periods when stormwater services receive less thought and funding.	Adhere to the maintenance and renewal structure laid out in the stormwater AMP.

<sup>^</sup>More information on climate change specifically for the Sorell Geographical area can be found in a document written for Sorell Council by University of Tasmania, Climate Change Information for Decision Making.

Additionally, the way in which we construct new assets should recognize that there is opportunity to build in resilience to climate change impacts. Stormwater resilience can have the following benefits:

- Assets will withstand the impacts of climate change;

<sup>2</sup> IPWEA Practice Note 12.1 Climate Change Impacts on the Useful Life of Infrastructure

# Sorell Council – Stormwater Asset Management Plan – 2022

- Services can be sustained; and
- Assets that can endure may potentially lower the lifecycle cost and reduce their carbon footprint

Table 22 summarizes some asset climate change resilience opportunities.

**Table 22. Stormwater Asset Resilience to Climate Change**

New Asset Description	Climate Change impact these assets?	Build Resilience in New Works
Storm Intensity	Rainfall intensities increased by 20%	This scenario has been modelled in the SSMP and provides modelling outputs which can be used to inform future stormwater design.
Sea Level Rise	0.90m sea level rise	This scenario has been modelled in the SSMP and provides modelling outputs which can be used to inform future stormwater design.
Flood Modelling	Flooding as a result of extreme weather events	Adapt pit and open drain inspection and maintenance frequency (eg. fix blockages before predicted weather events).

The impact of climate change on assets is a new and complex discussion and further opportunities will be developed in future revisions of this AM Plan.

## 5.6 Risks and Treatments

Critical risks are those assessed with ‘Very High’ (requiring immediate corrective action) and ‘High’ (requiring corrective action) risk ratings identified in the Infrastructure Risk Management Plan. The residual risk and treatment costs of implementing the selected treatment plan is shown in Table 23. It is essential that these critical risks and costs are reported to management and the elected Councillors. Sorell Council’s Corporate Risk Register which was developed in conjunction with GHD in 2022 also categorizes several of these risks.

**Table 23. Risks and Treatment Plans**

## Sorell Council – Stormwater Asset Management Plan – 2022

Service or Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk *	Treatment Costs
Stormwater network	Unknown condition of underground assets could lead to failure	High	Camera survey of selection of underground Pipes / Pits to ground truth condition data	Low	\$10,000
Stormwater network	High rate of residential growth result in insufficient capacity of stormwater network	High	Develop Storm water head works charge to allow upgrade of infrastructure as new developments are approved	Low	\$30,000
Stormwater network	Loss of key staff / unable to attract skilled operators	High	Mentoring and training opportunities for staff	Low	\$20,000
Stormwater network blockages causes localized flooding	Council can be found liable for damages	High	Document Pit inspections and plan inspections before major rain events to show proof of cleaning / inspection	Low	\$10,000
Shack communities transitioning to residential lack originally built stormwater infrastructure	Increased impervious surfaces concentrating stormwater runoff / localized flooding	High	Address flooding issues highlighted in the SSMP on a priority basis	Low	\$20,000
Stormwater network	Damage to underground stormwater assets by external contractors	High	Make Asset location data available via Dial Before you Dig platform	Low	\$2,000
Development stormwater design & calculations currently not reviewed	Flooding issues from incorrect calculations. Failure to protect overland flow paths	High	External Peer review of stormwater design and calculations	Low	\$5,000



# Sorell Council – Stormwater Asset Management Plan – 2022

Up to date and accurate flood model analysis	Flooding issues / damages due to inaccurate flood model data	High	Keep model up to date by re-running the model with the latest SW data	Low	\$20,000
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Note \* The residual risk is the risk remaining after the selected risk treatment plan is implemented.

## 5.7 Infrastructure Resilience Approach

The resilience of our critical infrastructure is vital to the ongoing provision of services to customers. To adapt to changing conditions we need to understand our capacity to ‘withstand a given level of stress or demand’, and to respond to possible disruptions to ensure continuity of service.

Resilience recovery planning, financial capacity, climate change risk assessment and crisis leadership.

Our current measure of resilience is shown in Table 24 which includes the type of threats and hazards and the current measures that the organisation takes to ensure service delivery resilience.

**Table 24. Resilience Assessment**

Threat / Hazard	Assessment Method	Current Resilience Approach
1 in 100 year flood event	Up to date flood modelling and ensure future developments / projects are constructed to cope with a 1 in 100 year flood event.	High
Coastal Erosion	Ensure future developments / projects are not constructed within the “High” or “Medium” risk coastal erosion risk areas	High
Coastal Inundation	Ensure future developments / projects are not constructed within the “High” or “Medium” risk coastal inundation risk areas	Low

## 5.8 Service and Risk Trade-Offs

The decisions made in adopting this Asset Management Plan are based on the objective to achieve the optimum benefits from the available resources.

### 5.8.1 What we cannot do

There are some operations and maintenance activities and capital projects that are unable to be undertaken within the next 10 years. These include:

- Bring all stormwater assets up to capacity for a 1 in 100 year flood event.
- Renew / Upgrade all recommendations made in the Stormwater System Management Plan.
- CCTV camera survey of the entire stormwater drain network in any one year.

# Sorell Council – Stormwater Asset Management Plan – 2022

## 5.8.2 Service trade-off

If there is forecast work (operations, maintenance, renewal, acquisition or disposal) that cannot be undertaken due to available resources, then this will result in service consequences for users. These service consequences include:

- Some of the stormwater network will be under capacity for a 1 in 100 year flood event.
- Some Medium and Low risk recommendations made in the SSMP will not be implemented.
- We will endeavour to survey a section of the stormwater drain network each year.
- Not meeting customer expectations.

## 5.8.3 Risk trade-off

The operations and maintenance activities and capital projects that cannot be undertaken may sustain or create risk consequences. These risk consequences include:

- Short term low hazard localised flooding in some areas during a 1 in 100 year flood event.
- Complaints from residents affected by localised flooding.
- Best estimate condition for some stormwater drains.
- Council's reputation could suffer as a result of not meeting customer levels of service / expectations.

These actions and expenditures are considered and included in the forecast costs, and where developed, the Risk Management Plan.

# Sorell Council – Stormwater Asset Management Plan – 2022

## 6 Asset Funding Levels

### 6.1 Asset Valuations

The Stormwater financial class was recently re-valued in June 2022. All assets were valued using level 3 valuation inputs using the cost approach. The approach estimated the replacement cost for each asset by componentising the assets into significant parts with different useful lives and taking into account a range of factors.

Replacement Cost (Current/Gross)	\$67,805,242
Depreciable Amount	\$49,946,617
Depreciated Replacement Cost <sup>3</sup>	\$49,946,617

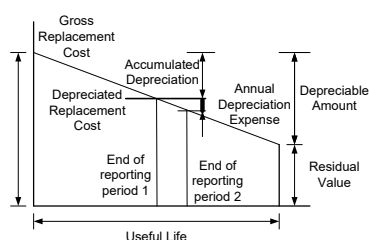


Table 25. Valuation Summary, revalued amount at 30 June 2022

Financial Sub Class	Gross Replacement Cost (\$)	Accumulated Depreciation (\$)	Fair Value (\$)	Estimated Annual Depreciation (\$)	Fair Value / GRC %
End Structures	361,517	93,263	268,254	4,519	74%
Open Gardens and Raingardens	1,822,028	303,925	1,518,103	28,977	83%
Stormwater Culverts	7,512,393	2,994,016	4,518,376	75,124	60%
Stormwater Drains	45,115,144	11,765,136	33,350,009	451,151	74%
Stormwater GPT	490,225	71,005	419,220	9,805	86%
Stormwater Pits	12,503,934	2,631,280	9,872,654	162,653	79%
<b>Total</b>	<b>67,805,242</b>	<b>17,858,625</b>	<b>49,946,617</b>	<b>732,229</b>	<b>74%</b>

Assetic's approach is considered asset centric consumption which can be interpreted as a straight-line depreciation where the annual depreciation = replacement value / useful life.

Council's useful lives (in years) have been derived from:

1. Reference and bench-marking with the *IPWEA Asset Management and Financial Management Guidelines, Practise Note 12 2017 Useful Life of Infrastructure*.
2. Where known construction dates, assessing remaining service potential as derived from visual condition inspections to determine total estimated useful lives.

<sup>3</sup> Also reported as Written Down Value, Carrying or Net Book Value.

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Assetic provided Sorell Council a valuation manual that details the methodology used (Assetic for Sorell Council, Stormwater Revaluation Methodology & Report June 2022). Please refer to for valuation patterns used / Remaining service potential, useful lives and components adopted in accordance with AASB 116.

## 6.2 Forecast 10-Year Funding Required

**Table 26. Net Strategy Cost Summary for Stormwater June 30 2022**

Simulation	Total Treatment Cost over 10 years
Current Funding (LTFP) - High LoS	\$1,586,545
Current Funding (LTFP) - Medium LoS	\$1,185,231
Current Funding (LTFP) - Standard LoS	\$229,181
Unlimited Funding Scenario - High LoS	\$1,586,545
Unlimited Funding Scenario - Medium LoS	\$1,185,231
Unlimited Funding Scenario - Standard LoS	\$229,181
Current Funding (LTFP) – Criticality Based	\$882,196
Unlimited Funding Scenario - Criticality Based	\$882,196

LoS = Level of Service, LTFP = Long Term Financial Plan (based on Depreciation)

Table 26 describes the treatments necessary for a number of different funding strategies. The different treatment scenario outputs have been generated from Assetic’s Predictor for a 10-year period. The outputs are based on three models, High Level of Service, Medium Level of Service and a Standard Level of Service. A criticality based scenario is also shown.

The high LoS treatment intervenes with the condition is 4 or greater (Refer to Table 14 for condition scale). The medium LoS treatment intervenes when the condition is 4.5 or greater and the Standards LoS the treatment intervention is at a 5 or greater. In the constrained budget (LTFP) funding scenarios, when budget is exceeded treatment preference is given to high criticality assets. A further criticality based scenario was modelled in which treatment intervention at 4 or greater for high and medium criticality assets and intervention at 5 or greater for low criticality assets.

Treatments were categorized into renewal and upgrade. Capacity rating for stormwater assets (described in Table 17) was used to determine whether an asset was under capacity and therefore triggered an upgrade treatment. A renewal treatment was selected for assets with a good capacity rating (1-2). Further information on treatments types, criteria and effects can be found in the Stormwater Lifecycle Modelling: Basis of Design document which outlines the methodology used in creating the predictive model.

## 6.3 Committed Funding

**Table 27. A summary of the committed funding over the next 10 years**

Year	Acquisition	Maintenance	Renewal	Disposal
2022	410000	599219	114891	0
2023	540000	597563	247104	0
2024	540000	601589	0	0
2025	540000	603353	0	0
2026	540000	606480	0	0
2027	540000	610581	0	0
2028	300000	616051	3252	0
2029	300000	620623	6656	0

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Year	Acquisition	Maintenance	Renewal	Disposal
2030	300000	626501	17228	0
2031	300000	635038	58661	0
2032	300000	643769	153936	0
2033	300000	652632	271609	0
2034	300000	660216	344142	0
2035	300000	665752	458670	0
2036	300000	672232	482196	0
2037	300000	673587	796563	0
2038	300000	678159	796271	0
2039	300000	683210	796952	0
2040	300000	685554	796999	0

### 6.4 Financial Ratios

There are two key indicators of sustainable service delivery that are considered in the AM Plan for this service area. The two indicators are the:

- asset renewal funding ratio (proposed renewal budget for the next 10 years / forecast renewal costs for next 10 years); and
- medium term forecast costs/proposed budget (over 10 years of the planning period).

#### Asset Renewal Funding Ratio

Asset Renewal Funding Ratio<sup>4</sup> - 458% based on our current funding and a High Level of Service.

The Asset Renewal Funding Ratio is an important indicator and illustrates that over the next 10 years we expect to have 458% of the funds required for the optimal renewal of assets. The figure is over 100% due to the LTFP using depreciation of stormwater assets to fund this asset class.

*Table 28. Asset Renewal Funding ratio's calculated based on the predicted treatments cost per strategy*

Simulation / Strategy	Planned Capital Renewals (10 years) (\$)	Required Capital Expenditure i.e. Predictor Treatment cost over 10 years (\$)	Asset Renewal Ratio
Current Funding (LTFP) - High LoS	\$7,265,000	\$1,586,545	458%
Current Funding (LTFP) - Medium LoS	\$7,265,000	\$1,185,231	613%
Current Funding (LTFP) - Standard LoS	\$7,265,000	\$229,181	3170%
Unlimited Funding Scenario - High LoS	\$7,265,000	\$1,586,545	458%
Unlimited Funding Scenario - Medium LoS	\$7,265,000	\$1,185,231	613%
Unlimited Funding Scenario - Standard LoS	\$7,265,000	\$229,181	3170%
Current Funding (LTFP) – Criticality Based	\$7,265,000	\$882,196	824%
Unlimited Funding Scenario - Criticality Based	\$7,265,000	\$882,196	824%

Table 28 shows us that depending on the treatment strategy used how the Asset Renewal Funding Ratio can change. As there are few outstanding condition 5 assets (due to Sorell Council's commitment to

<sup>4</sup> AIFMM, 2015, Version 1.0, Financial Sustainability Indicator 3, Sec 2.6, p

## Sorell Council – Stormwater Asset Management Plan – 2022

renew these assets since the 2017 condition survey) and limited condition 4 assets; there is little funding difference between the Current Funding (LTFP) and Unlimited Funding Scenarios in the first 10 years.

### Asset Consumption Ratio

*Table 29. Consumption Ratios for Stormwater Assets*

	Financial Sub Class	Gross Replacement Cost (\$)	Fair Value (\$)	Consumption Ratio
Revalued amount at 30 June 2022	End Structures	361,517	268,254	74%
	Open Gardens and Raingardens	1,822,028	1,518,103	83%
	Stormwater Culverts	7,512,393	4,518,376	60%
	Stormwater Drains	45,115,144	33,350,009	74%
	Stormwater GPT	490,225	419,220	86%
	Stormwater Pits	12,503,934	9,872,654	79%
	<b>Total</b>	<b>67,805,242</b>	<b>49,946,617</b>	<b>74%</b>

### Asset Sustainability Ratio

The Sustainability ratio has been calculated based on the different outcomes of the modelling.

*Table 30. Sustainability Ratios for different funding models*

Simulation	Predicted Capital Renewal expenditure over 10 years (\$)	Depreciation Expense (\$)	Sustainability Ratio
Current Funding (LTFP) - High LoS	\$1,586,545	\$7,322,290	22%
Current Funding (LTFP) - Medium LoS	\$1,185,231	\$7,322,290	16%
Current Funding (LTFP) - Standard LoS	\$229,181	\$7,322,290	3%
Unlimited Funding Scenario - High LoS	\$1,586,545	\$7,322,290	22%
Unlimited Funding Scenario - Medium LoS	\$1,185,231	\$7,322,290	16%
Unlimited Funding Scenario - Standard LoS	\$229,181	\$7,322,290	3%
Current Funding (LTFP) – Criticality Based	\$882,196	\$7,322,290	12%
Unlimited Funding Scenario - Criticality Based	\$882,196	\$7,322,290	12%

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Sustainability ratios have also been calculated over a 20 year period to better reflect the long life of stormwater assets. For a 20 year period the Current Funding (LTFP) - High LoS sustainability ratio is 58% and the Current Funding (LTFP) – Criticality Based is 49%.

## 6.5 Key Assumptions

In compiling this AM Plan, it was necessary to make some assumptions. This section details the key assumptions made in the development of this AM plan and should provide readers with an understanding of the level of confidence in the data behind the financial forecasts.

Key assumptions made in this AM Plan are:

- Current rates of maintenance, operational and depreciation expenditure are an indicator for future assets.
- Renewal forecasting has used an updated useful life approach using the current useful life held in the asset register for each component.
- The Condition value 0-6 was calculated using the current valuation index per component within the asset register and was derived from an age based / straight line accounting valuation process rather than a true component condition survey results.
- Sorell municipality will increase in population as per ABS projections.
- The AMP used only current day dollars, no indenting on lifecycle forecast costs.
- All assets valued at fair value are being used for their highest and best use.
- Council does not have Residual Values applied to any Stormwater assets or asset components.
- High Level of Service see treatment intervention at condition 4 and above.
- Medium Level of Service see treatment intervention at condition 4.5 and above.
- Standard Level of Service sees treatment intervention at condition 5 and above.

# Sorell Council – Stormwater Asset Management Plan – 2022

## 7 Action Plan

### 7.1 AM Document Register

**Table 31. Document Register**

Document Type	Asset Category	Adopted Version / Date	Planned Revision
Strategic Plan (10 year)		Aug 2019-29	2023-23
Asset Management Policy		Aug 2018	Sept 2022
Asset Management Objectives			
Strategic Asset Management Plan		V2 18/09/2018	
Asset Management Plans:			
	Transport	V3 2020	
	Buildings	V2 2021	
	Stormwater Drainage	V1 2014	V2 2022
	Land Improvements	current (V1 2019)	V2 2023
Asset Capitalisation Business Rules		V2 June 2021	V3 2022 after SW revaluation
Entura for Sorell Council, Sorell Stormwater System Management Plan 2020	Stormwater		
Stormwater in New Developments Interim Policy	Stormwater	Draft October 2022	
Assetic for Sorell Council, Stormwater Revaluation Methodology & Report	Stormwater	June 2022	
Assetic for Sorell Council Stormwater Life Cycle Modelling: Basis of Design	Stormwater	October 2022	

### 7.2 AM Practice Improvements

It is important that an entity recognise areas of their AM Plan and planning process that require future improvements to ensure effective asset management and informed decision making. The improvement plan generated from this AM Plan is shown in *Table 32*.

**Table 32. Improvement Plan**

Task	Task	Responsibility	Resources Required	Timeline
1	Create a schedule for yearly CCTV investigation of stormwater drain network to better understand condition data of underground assets.	GIS & Assets Officer , Assets Manager, Stormwater Works Supervisor	\$5,000-10,000 yearly	2022
2	Repeat condition assessments of stormwater pits by stormwater works crew to further define renewals program. Assess stormwater	GIS & Assets Officer , Assets Manager, Stormwater	Staff time	2023



## Sorell Council – Stormwater Asset Management Plan – 2022

	pits for both main condition and pit lid condition.	Works Supervisor		
3	Review operations and maintenance budget as a result of new significant assets being constructed in the next 5 years.	GIS & Assets Officer , Assets Manager, Stormwater Works Programmer	Staff time	2023
4	Review all stormwater assets currently in poor condition and plan to renew a selection of these assets each year.	Assets Team with Stormwater Works Supervisor	Staff time + 20,000 yearly	2040
5	Inform Long Term Financial Plan with more appropriate renewal budget requirements	GIS & Assets Officer , Assets Manager	Staff time	2023
6	Communicate as necessary if changes to corporate risk register are required	GIS & Assets Officer , Assets Manager	Staff time	Ongoing
7	Analyse fault code and cause of failure data regularly to identify any trends	GIS & Assets Officer , Assets Manager	Staff time	Ongoing
8	Create a schedule for regular inspection of high criticality stormwater culverts	Assets Team with Stormwater Works Supervisor	Staff time	Ongoing
9	Create a Water Quality monitoring schedule in accordance with Sorell Council's Planning Policy	Assets Team with Regulatory & Environmental Teams	Staff Time	Ongoing

### 7.3 Monitoring and Review Procedures

This AM Plan will be reviewed during the annual budget planning process and revised to show any material changes in service levels, risks, forecast costs and proposed budgets as a result of budget decisions.

# Sorell Council – Stormwater Asset Management Plan – 2022

The AM Plan will be reviewed and updated annually to ensure it represents the current service level, asset values, forecast operations, maintenance, renewals, acquisition and asset disposal costs and planned budgets. These forecast costs and proposed budget are incorporated into the Long-Term Financial Plan or will be incorporated into the Long-Term Financial Plan once completed.

The AM Plan has a maximum life of 5 years and is due for complete revision and updating by the 2027/2028 financial year by the Councillors that reside in that year.

## 7.4 Performance Measures

The effectiveness of this AM Plan can be measured in the following ways:

- The degree to which the required forecast costs identified in this AM Plan are incorporated into the long-term financial plan;
- The degree to which the 1-5 year detailed works programs, budgets, business plans and corporate structures consider the 'global' works program trends provided by the AM Plan;
- The degree to which the existing and projected service levels and service consequences, risks and residual risks are incorporated into the Strategic Planning documents and associated plans; and
- The Asset Renewal Funding Ratio achieving the Organisational target (this target is often 90 – 100%). It's understood that our current asset renewal funding ratio for stormwater assets is not realistic by using depreciation as it's basis for funding and as such capital works and preventative maintenance are discussed, prioritised and actioned annually based on professional judgement.

# Sorell Council – Stormwater Asset Management Plan – 2022

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- Sorell Council Stormwater in New Developments Interim Policy, October 2022 (DRAFT)

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# Sorell Council – Stormwater Asset Management Plan – 2022

## Appendix B: Valuation reference tables

*Table B- 1. Remaining service potential has been determined and applied in line with the following valuation matrices.*

Valuation Pattern	Description	Condition	Remaining Useful Life (%)
Stormwater	Brand New	0	100
	No Defects to Very Good	1	95
	Very Good to Good	2	80
	Good to Minor Defects	3	60
	Minor Defects to Fair	4	40
	Fair to Poor	5	10
	End of Life	6	0

*Table B- 2. Council's useful lives (in years).*

Asset Type	Expected Useful Life
Culvert	100
Culvert Headwall	80
Open Drain (Concrete)	100
Open Drain (Earth)	20
Detention Basin	80
Stormwater Drain	100
Stormwater End Structure	80
Stormwater GPT	50
Stormwater Pit	80

*Table B- 3. Stormwater asset components*

Asset Type	Component Name	Description
Culvert	Main	The whole culvert structure, except the headwalls
Culvert	Headwall	The culvert headwall
All Others	Main	The whole structure including earth works

Appendix C: Stormwater Criticality Rating Maps

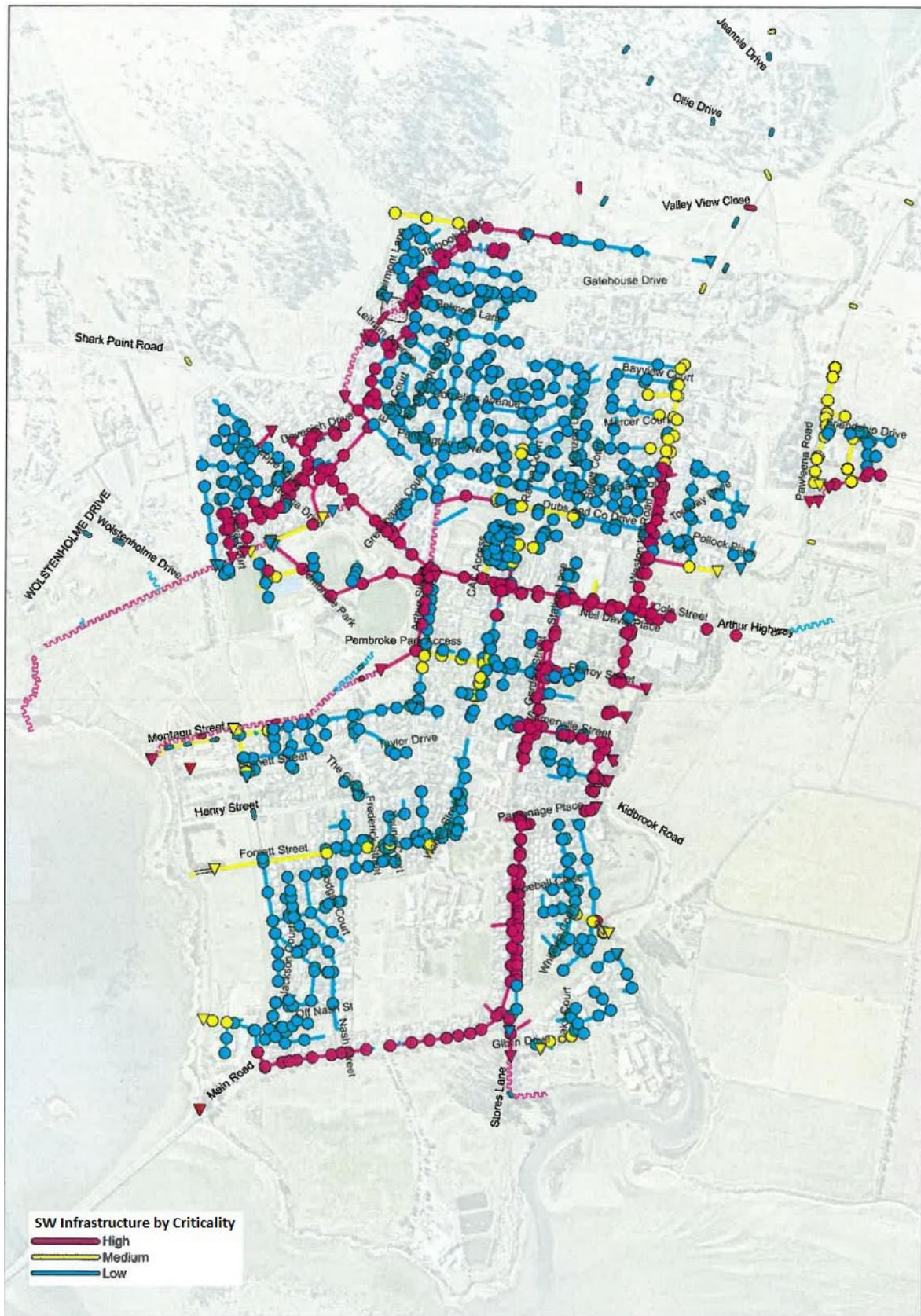


Figure C-1. Map of Sorell Stormwater Infrastructure by Criticality





# Sorell Council – Stormwater Asset Management Plan – 2022

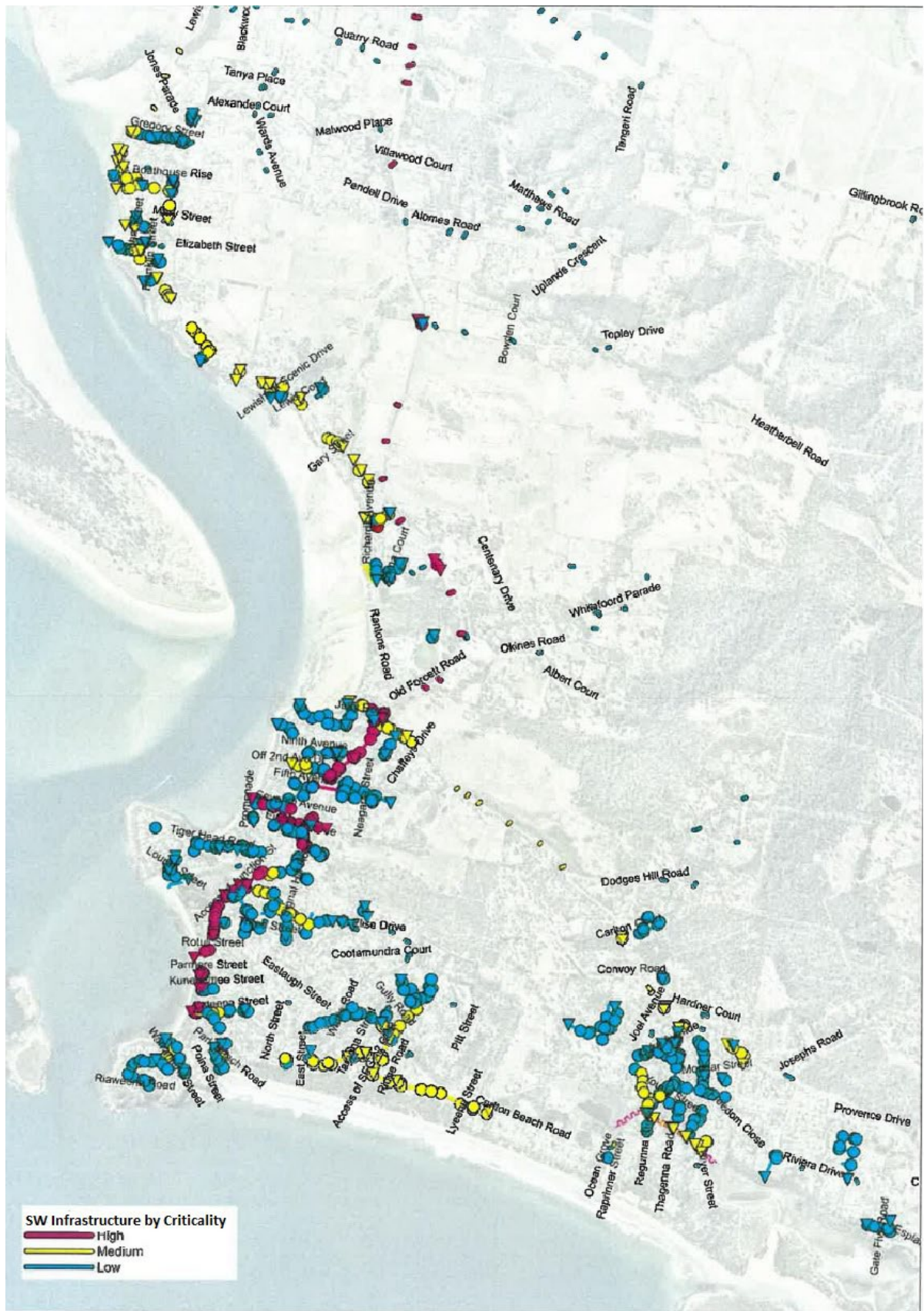


Figure C-3. Map of Dodge's Ferry Stormwater Infrastructure by Criticality



# Sorell Council – Stormwater Asset Management Plan – 2022



Figure C-5. Map of Dunalley Stormwater Infrastructure by Criticality



Attachment to item number 14.2-  
Dog Management Plan



# DOG MANAGEMENT PLAN

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2022

To be reviewed prior or during April 2027 and advertised for public consultation before 1<sup>st</sup> September 2027.

# DOG MANAGEMENT PLAN MUNICIPAL AREA OF SORELL - 2022

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# DOG MANAGEMENT PLAN MUNICIPAL AREA OF SORELL - 2022

## 1. Introduction

The *Dog Control Act 2000* came into effect on 2 April 2001. The later legislation has repealed the *Dog Act 1987* and therefore, becomes the primary legislation in this area.

Section 7 of the *Dog Control Act 2000* requires Council to develop and implement a policy relating to dog management within its municipal area.

A Dog Management Plan is to include the following:

- A code relating to responsible ownership of dogs.
- The provision of declared areas.
- A fee structure.
- Any other relevant matter.

## 2. Dog Management Plan – Process

That Council is to:

- Invite public submissions relating to a proposed Dog Management Plan, and
- Consult with any relevant body or organisation, and
- Consider any submissions and result of any consultation before finalising the Plan.

## 3. Dog Management Plan – Review

A Council is to review its Dog Management Plan at least once every five years.

In reviewing its Dog Management Plan, a Council is to take the actions referred to in that relevant section (S.7(3) of the *Dog Control Act 2000*).

## 4. Objectives

Ensure that dogs in the community are well cared for.

Ensure that dog owners are able to maximise their enjoyment of their animals with access to suitable public open space areas.

Ensure that owner's activities and those of their dogs do not adversely affect the rest of the community or the environment.

Identify and prioritise current and future animal management issues.

Develop a plan to address identified animal management issues.

Invite Submissions from:

# DOG MANAGEMENT PLAN MUNICIPAL AREA OF SORELL - 2022

- The Community, Animal Welfare Agencies, Conservation Groups, Veterinarians, and Regulatory Bodies in the consultation process to allow Council to make an informed decision.

## 5. Responsible Dog Ownership

To promote and encourage responsible dog ownership. Provide incentives to individuals who demonstrate responsible ownership.

Recognising that dogs and dog owners are an integral part of the community, contributing to its quality of life and ensuring that the needs of dogs and their owners are serviced whilst recognising the differing needs of all members of the community.

To encourage the training and education of dogs and their owners promoting responsible ownership within the community.

Design and implement a publicity campaign to provide dog owners with information relating to responsible ownership e.g. brochures, flyers, local newspaper articles.

The owner or person in charge of a dog must ensure that the dog is not at large.

A person carrying on primary production relating to livestock on rural land or any other person acting under his or her authority may destroy any dog at large found on that land.

## 6. Fees

Council is to set their own fee structure reflecting the costs of Dog Management control. It is expected that dog owners pay a reasonable portion of the costs incurred by Council.

- The entire system of Dog Control throughout the municipality is the ability of Council Officers to identify a dog's owner via the dog registration system which is a vital link needed to enforce the regulations and provisions of the *Dog Control Act 2000*.
- All dogs must be registered and microchipped at the age of 6 months and this must be done by the end of the month in which the dog becomes 6 months old. An application for registration is required to be completed and submitted to Council. The registration year is from 1<sup>st</sup> July to 30<sup>th</sup> June the following year.
- The Sorell Council will continue to provide reduced registration fees for desexed dogs in order to reduce the instances of unwanted or abandoned dogs and substantially reduced fees will be fixed for the entire 12 month period of the registration year commencing on the 1<sup>st</sup> of July 2023.
- A discount will also be offered to pensioners and people who hold a health care card for one dog only; any other dog incurs standard registration fees.
- All relevant fees will be reviewed annually. The Sorell Council will take into consideration other Council's proposed fee structure to ensure all related dog fees maintain a level of consistency.



# DOG MANAGEMENT PLAN MUNICIPAL AREA OF SORELL - 2022

- The Sorell Council will transfer dog registrations from other Tasmanian Council's at no cost to the dog owner, provided the registration is for the same registration period.

## 7. Registration Fees

All registration fees to be reviewed annually.

## 8. Kennel Licences

Where a person keeps more than two dogs (or, in the case of working dogs, 4 dogs) on any property, they must apply to Council for a Kennel Licence.

A notice of intention to apply for a kennel licence must be published in the public notices section of the Mercury Newspaper on any day except Sunday in the prescribed format.

Any person residing or owning land within 200 metres of the boundary of the property to which a licence relates may object to the granting of the licence within 14 days after the notice is published.

The objection is to be in writing and set out the reasons for the objection.

### 8.1 How will Council Process the Application?

Council cannot consider the application until twenty eight (28) days after the publication of the "Notice of Intention to Apply for Kennel Licence".

A Council Officer will inspect the property including all kennels and yards for suitability.

The application will not be considered until all dogs kept on the property are registered.

### 8.2 How will Council reach a Decision?

In reaching a decision as to whether to grant a licence and if so what conditions, if any, shall apply to the licence, the General Manager may take into account any relevant objections.

The site inspection report will be considered together with any other matters that relate to public health and environmental laws.

The likelihood of the dogs creating a nuisance by barking or otherwise will be taken into consideration and in some cases professional opinions may be required and suggestions implemented before the granting of the licence is considered.

# DOG MANAGEMENT PLAN MUNICIPAL AREA OF SORELL - 2022

Where the application is successful, the licence will be issued together with a covering letter drawing the licence holder's attention to the conditions that apply to the licence, and notification of the date that the licence expires.

Where a licence is refused, the applicant will receive written notification.

## 8.3 Can Council Refuse to Grant, Renew or Cancel a Licence?

The General Manager on the recommendation of an Authorised Officer may refuse to grant a licence if the General Manager is of the opinion that:-

- The premises are unfit for the purpose of keeping the number and type of dogs applied for;
- It would be in the public interest not to grant the licence.

Renewal of a licence may be refused or cancelled if Council is of the opinion that:-

- The requirements of the Dog Control Act are not being complied with;
- It is in the public interest that the licence not be renewed.
- That the conditions of the licence are not being complied with.
- That the dogs or the condition of the area where the dogs are kept is creating or is likely to create a nuisance.

## 8.4 What if Council Refuses to Grant, or Renew, or Intends to Cancel a Licence?

You may appeal to a magistrate. An appeal shall-

- Be instituted by giving written notice to the Clerk of Petty Sessions on the prescribed form;
- Be accompanied by the prescribed fee;
- Be made within the prescribed time (21 days of the date of Council notification); and
- Otherwise, be instituted in the prescribed manner.

At the hearing of an appeal, the magistrate may-

- Dismiss the appeal; or
- Direct the Council to grant or renew the licence;
- Quash the Council's decision to cancel the licence, subject to any conditions the magistrate thinks fit;
- Council must comply with any directions given to it by the magistrate;
- The magistrate's decision is final.

## 8.5 Renewal of Licence

Kennel licences expire on the 30<sup>th</sup> day of June each year.

Licences may be renewed for a further twelve months upon payment of the prescribed fee and a satisfactory inspection of the premises by an Authorised Officer.

# DOG MANAGEMENT PLAN MUNICIPAL AREA OF SORELL - 2022

## 8.6 Can the Licence be transferred to Another Person or Property?

Licences are not transferable from one person to another, nor are they transferable from property to property, therefore if you:-

- Sell your property and the new owner requires a kennel licence; or
- You move to another property and wish to retain your licence;

a new application will need to be submitted.

An applicant will need to meet the costs of publishing their intention to apply for a licence.

## 9. Penalties

The Act states that a person who keeps more than two dogs (or in the case of working dogs, four dogs) six months of age or over, on any premises not being licenced premises, is guilty of an offence and is liable on summary conviction to a maximum fine of 5 penalty units.

Normally an Authorised Officer would issue an Infringement Notice for unlicensed premises (1 penalty unit). Non-payment of this fine would then involve the previously mentioned legal action being taken.

## 10. Commercial Boarding Kennels

Do not require a Kennel license under the *Dog Control Act 2000*, however, a Planning Permit under the Land Use Planning and Approvals Act 1993 must be obtained.

## 11. Dangerous Dogs

The *Dog Control Act 2000* substantially increases the penalties and restrictions on owners of dogs declared dangerous.

Classifying dogs as dangerous is an effective method of controlling individual dogs that have demonstrated aggressive or dangerous behaviour. Council will, where appropriate, classify dogs as dangerous.

A dog may be considered dangerous because of an obvious act or incident in which it has threatened, attacked, and in some cases, caused serious injury or death to an animal or person. This physical act is an expression of aggression and in most cases, this aggression has been contributed to by human intervention. There are several triggers for aggression in dogs. They are:

- Territorial aggression

## DOG MANAGEMENT PLAN MUNICIPAL AREA OF SORELL - 2022

- Protective aggression
- Fear aggression
- Predation aggression
- Dominance aggression
- Learned aggression

No matter what the trigger, or the level of human intervention, it is not an acceptable community standard that dogs who display aggression be allowed to be in a position to carry out the physical act. Council in its commitment to ensuring a safer environment endorses legislation in relation to dangerous dogs. A General Manager of a council may declare a dog to be dangerous dog if:

- a) The dog causes serious injury to a person or another animal: or
- b) There is a reason to believe the dog is likely to cause serious injury to a person or another animal.

The owner of a dog declared to be dangerous has the right to appeal the decision to a Magistrate; the appeal must be lodged within 14 days of notification of the declaration.

The owner or person in charge of a dangerous dog must be at least 18 years of age, must ensure that whilst the dog is in a public place, is on a lead not exceeding two metres, is held by hand and is sufficient to control and restrain the dog. The dog must be muzzled and unable to bite a person or animal and when not in a public place housed in an enclosure that complies with the prescribed requirements. The dog must at all times wear an approved collar supplied by the Council.

The owner of a dog declared to be dangerous must ensure that the dog is de-sexed and implanted with an approved microchip within 28 days after notification that the dog has been declared dangerous.

The owner or person in charge of a dangerous dog must ensure that appropriate signs of an approved type warning of the presence of a dangerous dog are displayed at every entrance to the premises on which the dog is kept. These signs are only obtainable through Council.

The cost associated with the purchasing of prescribed dog collar, micro-chipping, desexing and appropriate signage is the responsibility of the dog owner.

Any premises on which a declared dangerous dog is being kept will be inspected on a regular basis by an Authorised Officer to ensure that the dog is housed correctly and that the owner is complying with the requirements as defined in the *Dog Control Act 2000*.

Appropriate legal action will be taken against any dangerous dog owner not complying with the regulations.

# DOG MANAGEMENT PLAN MUNICIPAL AREA OF SORELL - 2022

## 12. Restricted Breed Dogs

Dogs of a breed which have been banned from importation into Australia may be declared restricted breed dogs. Of the breeds banned from importation, only the American pit bull terrier or pit bull terrier is understood to be in Tasmania.

Council officers will determine whether a dog is a restricted breed dog based on approved guidelines, which will include key characteristics of dog breeds such as height, weight, coat, colouration, tail carriage, facial and body features.

Owners can appeal the declaration of their dog as a restricted breed dog to the Magistrates Court (Administrative Appeals Division) within 28 days of the service of the declaration. In such an appeal, the onus is on the owner to prove that the dog is not a restricted breed.

The owner or person in charge of a restricted breed dog must be at least 18 years of age, must ensure that whilst the dog is in public place, is on a lead not exceeding two metres, is held by hand and is sufficient to control and restrain the dog. The dog must be muzzled and unable to bite a person or animal. The dog must at all times wear an approved collar supplied by the Council.

The owner of a dog declared to be a restricted breed must ensure that the dog is desexed and implanted with an approved microchip within 28 days after notification that the dog has been declared.

The owner or person in charge of a restricted breed dog must ensure that appropriate signs of an approved type warning of the presence of a restricted breed dog are displayed at every entrance to the premises on which the dog is kept. These signs are only obtainable through Council.

The cost associated with the purchasing of prescribed dog collar, micro-chipping, desexing and appropriate signage is the responsibility of the dog owner.

## 13. Complaints

With an ever-increasing urban animal population, there will invariably be associated problems with them. It is expected that with a balance of proactive and reactive education and enforcement this will minimize the impact of inappropriate dog behaviour.

Council recognizes the right of community members to seek assistance in dealing with nuisances created by dogs. Council represents the community and ensures that quality services are provided. This is best achieved by open communication between Council staff, the complainant, and the dog owner/s.

To this end, Animal Management Officer's will not respond to complaints made anonymously. Council requires all complaints to be made in writing stating the complainants name, address and telephone number. It is essential that staff have access

# DOG MANAGEMENT PLAN MUNICIPAL AREA OF SORELL - 2022

to this information so they may clarify details, seek further information, and to advise outcomes of investigations onto the complainant. This information is strictly confidential and not passed on to any other member of the community.

## 14. Nuisance Dogs

Council currently spends large amounts of time associated with the problems caused by nuisance dogs and in particular the issue of excessive barking. Council's preferred option is to consult with both the complainant and the dog owner addressing the issues why the dog is barking and offering advice and Council resources, which often resolves the issues quickly without the need for lengthy legal proceedings, which are costly and time consuming. The most important issue is for the owner to be made aware of the nuisance and to be advised as to the best methods available to alleviate the problem.

In many circumstances the owner of the dog may not be aware that their dog/s are barking a lot, particularly if the barking occurs when they aren't at home. Rather than contacting Council in the first instance, residents are encouraged to either discuss with their neighbour or anonymously notify them using a template letter available to download from Councils' website.

Upon receipt of a written complaint regarding a nuisance dog, the following procedure is followed:

### 14.1 First Stage

Council officers will make contact with the complainant and the owner of the dog to discuss the matter and strategies may be discussed to reduce or minimise the nuisance. Council officers may request that the complainant keep an accurate record of the barking over a period to assist council in determining a pattern of barking, this record may be used as evidence later if the matter went to Court.

### 14.2 Second Stage

The owner of the dog is given a reasonable amount of time, normally two weeks to address the nuisance and if requested an Authorised Officer may inspect the property and offer advice to overcome the problem such as the use of an anti-bark collar or other methods. The aim of the discussion is to reach agreement acceptable to both the complainant and the dog owner without the need for legal action.

### 14.3 Third Stage

If no attempt has been made by the dog owner to alleviate the problem or no contact made with Council Officers, the complainant is requested to complete the appropriate form in accordance with Section 47(2) (a) of the *Dog Control Act 2000*. The person is required to pay a fee that will be refunded if their complaint is substantiated. After receipt of an official complaint, Council Officers will investigate the complaint speaking

# DOG MANAGEMENT PLAN MUNICIPAL AREA OF SORELL - 2022

to neighbours in the vicinity and inspecting the offending property at various times to assess if the dog is considered a nuisance.

The complainant must also be prepared to appear in court as a witness if legal proceedings are instigated. It is only by this means that formal action can be initiated. If a complainant is not prepared to lodge a Formal Notice of Complaint and / or not prepared to appear as a witness in court, Animal Management Officer's may determine that no further action will be taken in regard to the complaint.

If the complaint is found to be genuine, the Council may institute proceedings for an offence under Section 46 of the *Dog Control Act 2000*.

The owner or person in charge of a dog must not permit the dog to become or create a nuisance. A dog is a nuisance if:

- a) It behaves in a manner that is injurious or dangerous to the health of any persons, or
- b) It creates a noise by barking or otherwise, it persistently occurs or continues to such an extent that it unreasonably interferes with the peace, comfort or convenience of any person or persons.

What factors does Council take into consideration to determine if dog barking is a nuisance?

- how frequently throughout the day the barking occurs
- how many days per week the barking occurs
- the time of the day the barking occurs
- the distance between the barking dog and the complaints house
- if the barking is also annoying surrounding neighbours
- what factors are causing the dog to bark

**There is no 'hard and fast' rule for what constitutes a nuisance.**

## 15. Provision of Declared Areas

Maps of Dog exercise areas, restricted areas and prohibited areas can be found on the Sorell Council Website ([www.sorell.tas.gov.au](http://www.sorell.tas.gov.au))

The Dog Control Act sets out a procedure for the declaration of areas in which there are particular restrictions. The process involved before the declaration of any areas will include the advertising of the proposed area on at least two occasions in the public notices section of the newspaper inviting the public and any appropriate body or organisation to submit in writing any comments or objections relating to a proposed declared area.

In assessment of any proposed declared areas, Council will consider the following criteria:

- Access;

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- Environmental Impacts;
- Public safety issues;
- Land use;
- Proximity to residential areas; and
- Any requirements of the land owner if the declared area is Crown land.

Council will consider any submissions and the results of any consultation before finalising any policy in relation to declared areas. Investigation of suitable areas will be ongoing.

### **16. Off the Lead Dog Exercise Area**

**(In these areas dogs are allowed off a lead but under effective control)**

The following areas are areas where dogs can be exercised off the lead provided they remain under the effective control of the owner at all times.

A dog off the lead and under effective control is defined as in close proximity and within site of the person and that person must if so directed by an Authorised Officer demonstrate that the dog is immediately responsive to that person's commands.

### **17. Training Areas**

**(In these areas dogs are allowed off a lead but under effective control)**

Council may declare an area to be an area where dogs may be trained subject to any specified conditions.

Specific exercise and training areas will be considered by Council upon written request from dog obedience trainers, registered clubs and / or community representatives.

### **18. Prohibited Areas**

**(In these areas dogs are not allowed at all times)**

Council in consultation with Parks and Wildlife Service may declare an area containing sensitive habitat for native wildlife to be an area where dogs are prohibited from entering.

### **19. Prohibited Public Areas**

**(In these areas, dogs are not allowed at all time)**

A person must not take a dog into:

- Any grounds of a school, pre-school, kindergarten, crèche or any other place where without the permission of the person in charge of the premises.
- Any shopping centre or shop.
- Any grounds of a public swimming pool.
- Any playing area of a sports ground on which sport is being played.
- Any areas within 10 metres of a children's playground.

These restrictions do not apply to any guide dog or hearing dog.



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## 20. Dog-Restricted Areas

(Specified time, month, day or season on or off lead)

In these areas, dogs are not allowed during the times and/or dates specified. These are areas where it is considered that a significant conflict exists, however, this is limited to particular times and/or dates. In order to prevent danger, and to minimize distress and nuisance, dogs shall be prohibited from these areas during the times and/or dates specified.

A Council may declare an area to be an area where dogs, other than guide dogs or hearing dogs, are restricted from entering. Restricted areas may also include particular times during a year or specified hours.

A Council may also declare an on-lead area, where dogs may be walked but must be kept on lead at all times.

**Council officers conduct regular patrols in restricted and prohibited areas for compliance during Council business hours.**

**After hours patrols including weekends and public holidays are also conducted throughout the year.**

## 21. Impounding of Dogs

All dogs impounded will incur an impounding fee and a maintenance/release fee for every day impounded. An infringement notice will be issued in accordance with the *Dog Control Act 2000* Section 16(1) "Failure to ensure a dog is not at large" – Penalty. (One penalty unit)

*Options for dealing with this infringement notice:*

You must within 28 days of the date of service of this notice do one of the following:

- pay the infringement notice in full;
- apply to the General Manager for the withdrawal of the infringement notice;
- apply to the General Manager for a variation of payment conditions; or
- lodge a notice of election for a court hearing with the General Manager.

If you do not lodge a notice of election for a court hearing within 28 days of the service of the infringement notice and the infringement notice is not withdrawn, you will be taken to be convicted of the offence(s) set out in the infringement notice. If you are taken to be convicted and do not pay, either in full or as arranged under a variation of payment conditions, the monetary penalty may be enforced under the *Monetary Penalties Enforcement Act 2005*.

**Note: After referral to the Director, Monetary Penalties Enforcement Service, costs will be added which will be in addition to the unpaid infringement amount.**

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## 22. Elect a court hearing

If you wish to have the offence(s) to which this infringement notice relates determined by a court, or you wish to argue that the penalty should be reduced, you must lodge a written notice to elect a court hearing with the General Manager.

## 23. How to Pay

The Notice may be paid at the Sorell Council Offices, between 8.00am and 4.45pm on Council working days.

## 24. Application for Payment Variation

If you need more time to pay, you can apply to make payment arrangements by writing to the General Manager, Sorell Council, PO Box 126, Sorell 7172.

## 25. Infringement issue enquiries

For enquiries relating to the issue of this infringement notice call (03 62 69 0000).

Where a dog is recovered from Council's pound it shall not be released until it is registered and all registration and pound fees paid.

If a dog is seized and its owner is not identifiable, the dog will be impounded at the Sorell Council pound for a minimum of three Council working days. If the dog is not reclaimed within this period, the dog becomes the property of Council.

If a dog is seized and its owner is identifiable, the General Manager is to notify in writing the owner of the dog that the dog has been impounded. If after five Council working days from the date the notice is issued, the owner does not reclaim the dog it becomes the property of Council.

## 26. Signage

The Sorell Council will erect appropriate signage to identify all exercise, training, prohibited and restricted areas.

## 27. Sick & Injured Animals

Enquiries regarding sick and injured animals should be directed to the RSPCA or the animal taken to a veterinarian practice.

## 28. After hours on call

For after-hours emergencies in relation to dogs call 62 69 0000 and follow the prompts which will place you in touch with the on-call provider who will notify the on-call officer.

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Councils on-call officer will only respond to dog attacks, however, the on-call provider will notify the officer of lost and found dogs and the officer will then notify the caller if they can reunite the dog with its owner.

### 29. Dog Control Act 2000

A full copy of the Act can be found on the web site at  
<http://www.dpac.tas.gov.au/divisions/lgo/legislation/legislation.html>