



Local Water Utility Strategic Plan

2026–2036

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Hay Shire Council - Local Water Utility Strategic Plan 2026-2036

1. Executive Summary

This Strategic Plan has been prepared to align with the NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) expectations for Local Water Utility (LWU) strategic planning, including:

- Clear articulation of service context, risks and performance outcomes
- Demonstrated alignment with Integrated Water Cycle Management (IWCM)
- Integration with Council's Long Term Financial Plan (LTFP) and Asset Management Plans
- Identification of priority projects suitable for external funding.

The Plan sets the long-term direction for Hay Shire Council's Local Water Utility (LWU) for the period 2026–2036. It establishes a clear framework to ensure the continued delivery of safe, reliable and sustainable water supply and sewerage services to the Hay community, while responding to regulatory requirements, environmental challenges, climate variability and local economic growth opportunities.

As a small rural local water utility, Hay Shire Council operates within a constrained financial and operational environment, characterised by a limited ratepayer base, ageing infrastructure, and increasing compliance expectations. At the same time, the community relies on the LWU to support public health, liveability, agricultural activity, tourism, and future development. This Plan balances these pressures by focusing on prudent investment, strong governance, innovation in service delivery, and long-term financial sustainability.

The Plan prioritises the following strategic outcomes:

Secure, resilient and high-quality drinking water supplies that meet or exceed NSW Health requirements

- Reliable sewerage services that protect public health and minimise environmental impacts in accordance with EPA licence conditions
- Long-term financial sustainability through best-practice asset management, full cost recovery and responsible pricing
- Innovation in service delivery, including digital monitoring, smart metering, renewable energy integration and recycled water opportunities
- Strong partnerships with government agencies, neighbouring councils and the community to build resilience to drought, flood and climate change

This Strategic Plan aligns with Council's Integrated Planning and Reporting (IP&R) framework, Long Term Financial Plan, Asset Management Plans and Integrated Water Cycle Management Plan, and provides a clear roadmap for investment and decision-making over the next decade.

2. Purpose and Scope

Purpose

The purpose of this Strategic Plan is to guide Council's investment, operational priorities and decision-making for the delivery of water supply and sewerage services. It provides a clear, long-term direction for the Local Water Utility, ensuring services are safe, compliant, affordable and sustainable for current and future generations.

Specifically, the Plan aims to:

- Support compliance with all relevant regulatory and assurance frameworks
- Prioritise infrastructure renewal and risk reduction
- Strengthen financial sustainability of the Water and Sewer Funds
- Improve customer service and transparency
- Enhance resilience to climate variability and extreme events

Scope

This Plan applies to all aspects of Hay Shire Council's Local Water Utility, including:

- Water supply sourcing, treatment, storage and distribution
- Sewerage collection, treatment and effluent management
- Asset management and capital works planning
- Regulatory compliance and reporting
- Customer service and community engagement
- Financial planning, pricing and reserves

3. Context and Background

Hay Shire Council exercises water supply functions under *Division 2 Part 3 Chapter 6 Local Government Act 1993* (the Act) and *Water Management Act 2000* for the localities within the Hay Shire. In this capacity Council holds Water Entitlements with the subcategory “town water supply” (Town Water) and is a designated local water utility.

3.1 Service Area

The Local Water Utility services the Hay township, providing reticulated potable and raw water supply and sewerage services to residential, commercial, industrial and community customers.

3.2 Population and Demand

The permanent population of Hay is approximately 2,400 residents, with seasonal fluctuations driven by tourism, agricultural activity and regional projects. Water demand is influenced by climate conditions, consumer demand, regional projects and population changes.

3.3 Assets Managed

Water Supply Network:

Hay Shire Council operates a potable water system and raw water system which are both reticulated to the townships of Hay and Hay South. Both systems source water from the Murrumbidgee River at different intake points. Water supply and sewerage services for the rest of the LGA depend on rainwater tanks and/or privately owned bores for water supply and on-site sewage systems.

The urban centre, river intakes, reservoir and treatment plants are shown in Figure XX.

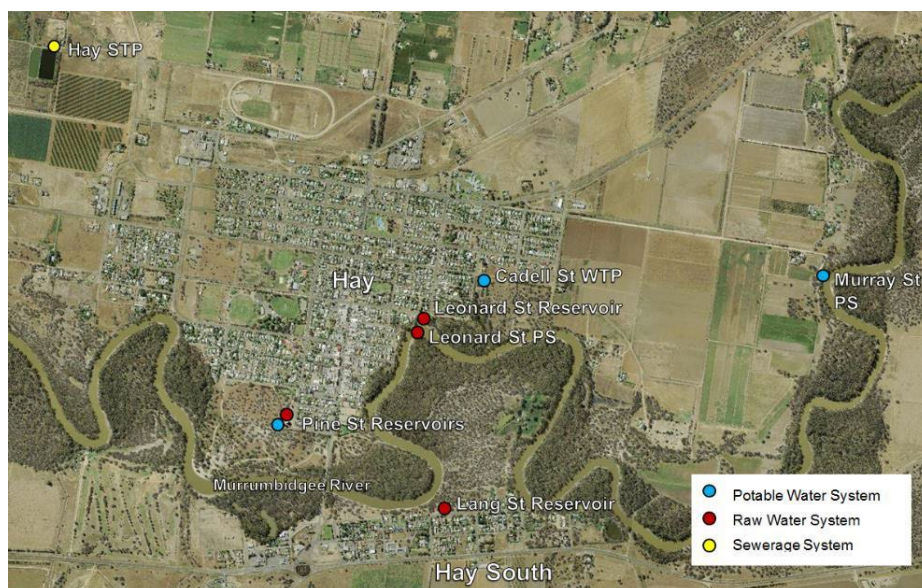


Figure 1.1 Hay Township

Hay Township

The water supply scheme layouts are shown below in Figures 1.2a & 1.2b

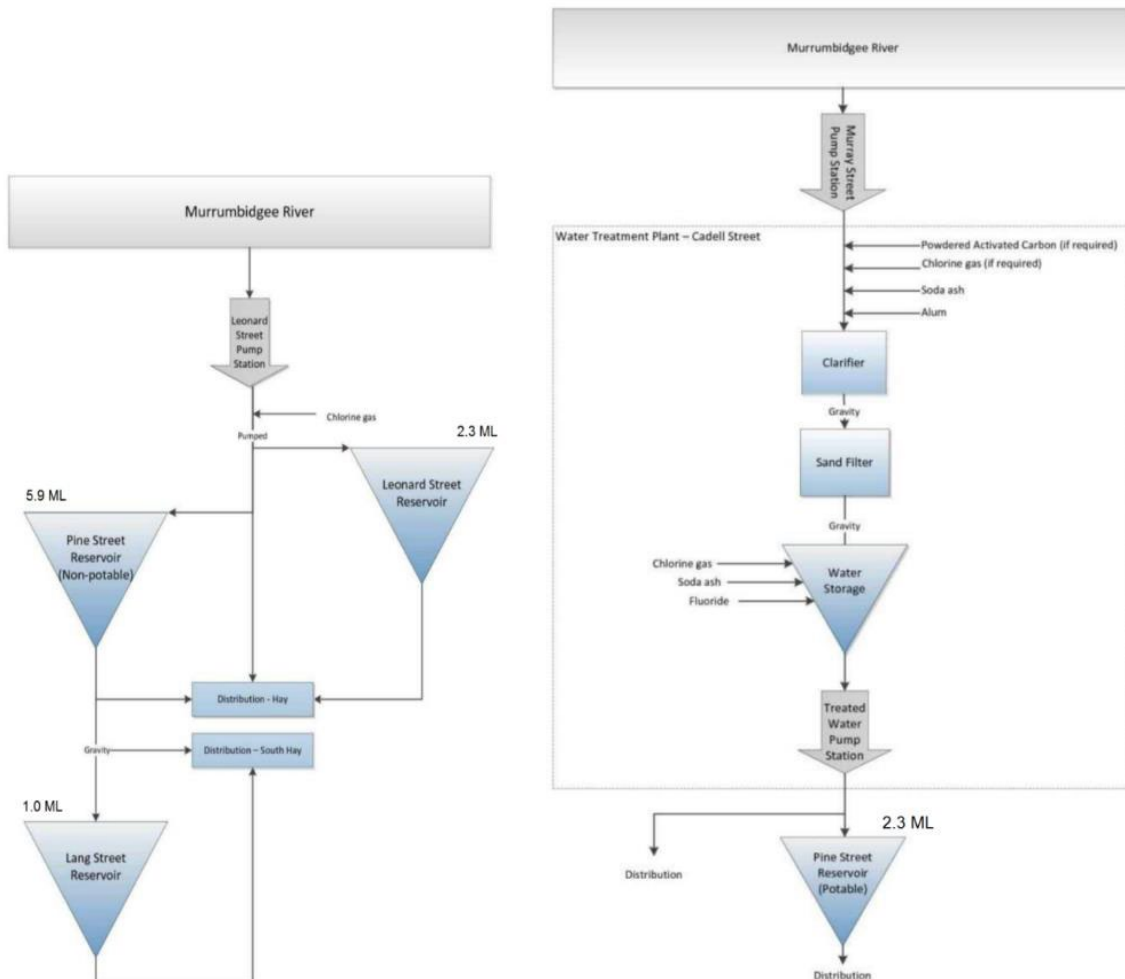


Figure 1.2a Hay Raw Water distribution system

Figure 1.2b Potable Water distribution system

Both the potable water system and raw water system source water from the Murrumbidgee River. The Murray Street Pump Station to the east of town has a duty of 26 L/s, and pumps water from the river to the Hay Water Treatment Plant (WTP) for treatment. The Leonard Street Pump Station has a duty of 228 L/s and pumps into the raw water system. Council holds one Water Access License (WAL6457) to extract from the Murrumbidgee, issued under the *Water Management Act 2000*. The following apply to the WAL:

WAL license number	WAL 6457
Water Source	Murrumbidgee Regulated River Water Source
Category [Subcategory]	Local Water Utility
Entitlement	2,805 ML/year
Water Sharing Plan (WSP)	Murrumbidgee Regulated River Water Source 2016

The Murray Street Pump Station and Leonard Street Pump Station are both authorised to take water under works approval number 40WA400013.

Water from the Murrumbidgee River is pumped by the Murray Street PS to the Hay WTP, located at Cadell Street, for treatment. The WTP is shown in Figure 1.1



Figure.1.3 Hay Water Treatment Plant

The Hay WTP was built in 1988 and has a capacity of 2.2 ML/day. The treatment is a conventional filtration process, consisting of alum coagulation, clarification, and media filtration. Pre-dose chemicals can be added if required, PAC (for removal of taste and odour caused by algae in the river), chlorination (for oxidation of metals such as iron, rarely used) and soda ash (for pH correction, rarely used.) Potable water is dosed with fluoride and chlorine (gas) prior to distribution.

Sludge from the clarifier is discharged to one of the two sludge lagoons that is in duty. The sludge is concentrated in the lagoon as water evaporates and supernatant is discharged to the Murrumbidgee River. Very little supernatant is discharged. Council holds an Environment Protection Licence (EPL) No. 3237 for its Hay WTP premises to discharge up to 200 kL per day of sludge lagoon supernatant with a Total Suspended Solids concentration of up to 100mg/L. There have not been any breaches of the licence since 2002.

Water supplied to the raw water scheme is treated with chlorine gas prior to distribution.

Analysis indicates that the current Water Usage does not exceed 1400 ML in a Dry Year (rainfall is well below average) and 1150ML in a Wet Year (rainfall is well above average).

Treated water from the Hay WTP is stored in a Clear Water Tank on site and then pumped to the 2.3 ML Pine Street potable water reservoir for distribution.

The location of the potable water infrastructure is given in Figure 1.4

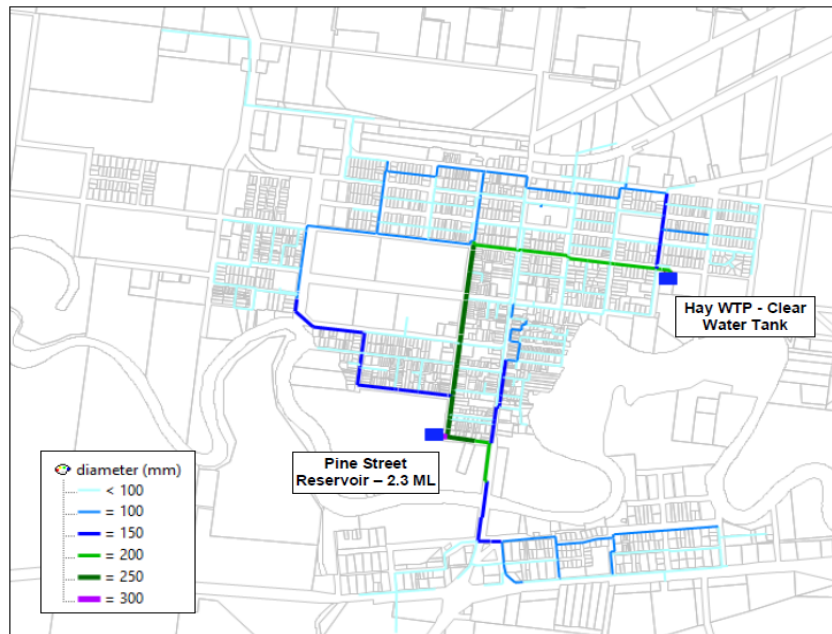


Figure 1.4 Hay potable water reticulation system layout plan

Water for the raw water scheme is pumped directly into the reticulation. There are two floating reservoirs in Hay which provide supply reliability and pressure – the 2.3 ML Leonard Street reservoir and the 5.9 ML Pine Street raw water reservoir. There is also a 1.0 ML Lang Street reservoir in the south of Hay.

The location of the raw water infrastructure is given in Figure 1.5

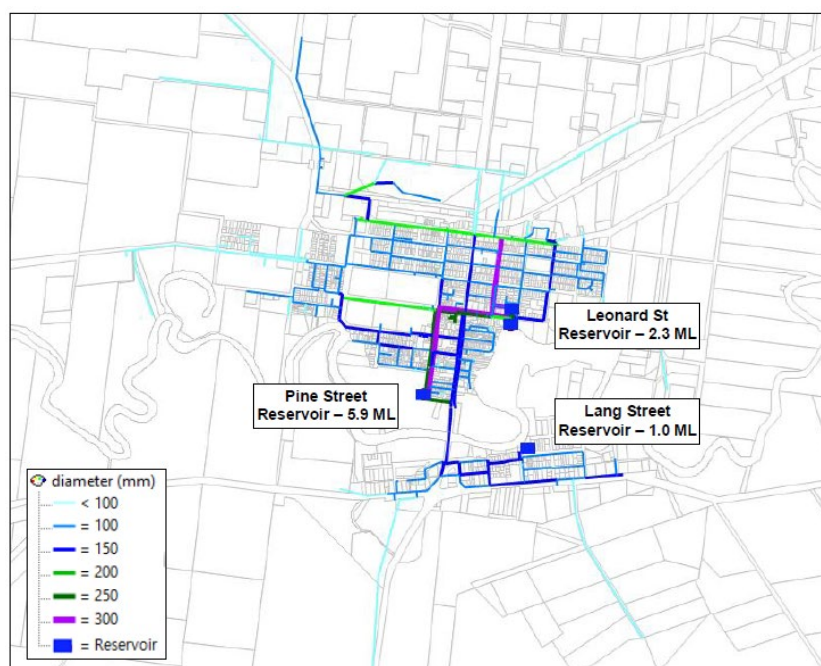
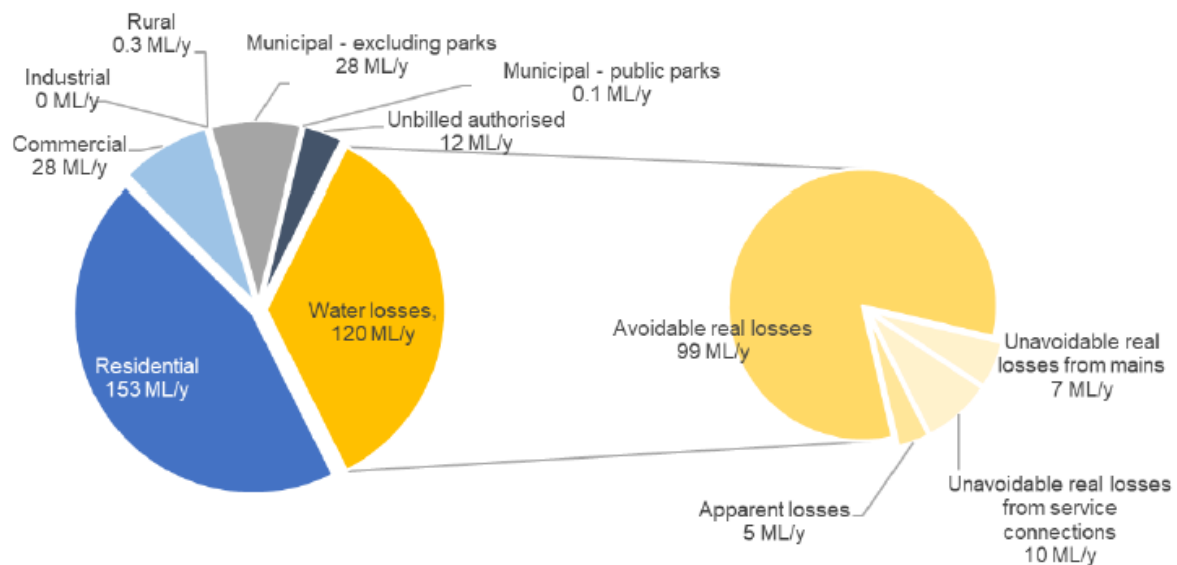


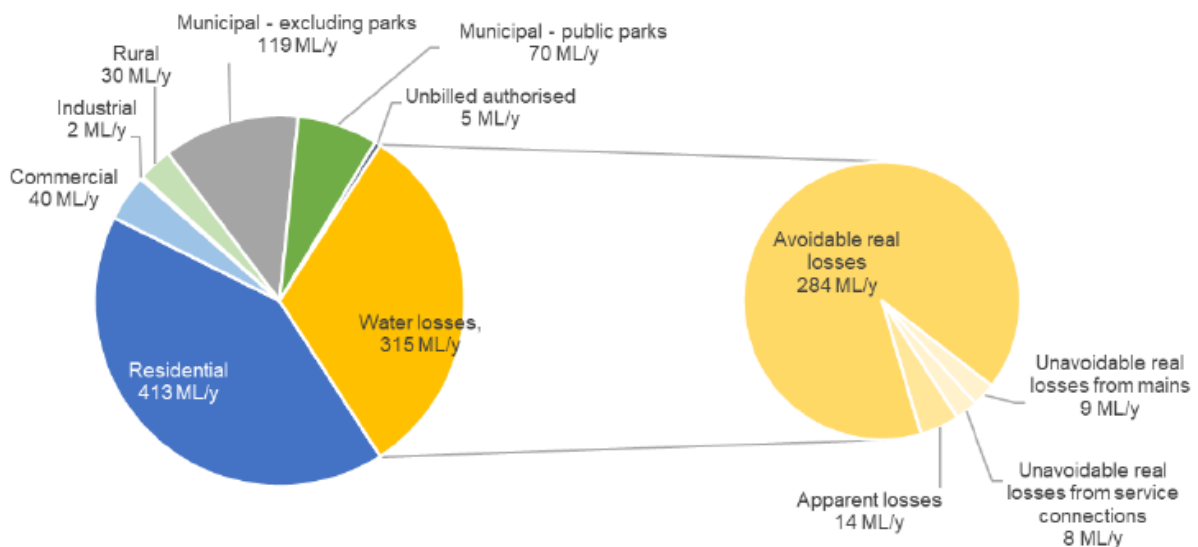
Figure 1.5 Hay Raw Water reticulation system layout plan

The historical number of meters for Hay Raw WSS and Hay Potable WSS is 2,665.

On average, around 35% of the water produced in Hay Potable WSS is estimated to be lost. The average unit water loss is estimated to be 265 L/meter/day.



On average, around 30% of the water produced in Hay Raw WSS is not accounted for in the billing data. The average unit water loss is estimated to be around 610 L/meter/day.



Sewage Network:

The Hay sewerage scheme is a conventional gravity reticulation system, consisting of approximately 30 km of mostly vitreous clay sewer gravity mains, and 4 km of rising mains, some sections of which dates back to 1905, and eight sewage pump stations (SPSs). SPS 1 pumps all sewage to the inlet works of the Hay sewage treatment plant (STP) via a sewage rising main. The hierarchy of the SPS are shown in Figure 1.6.

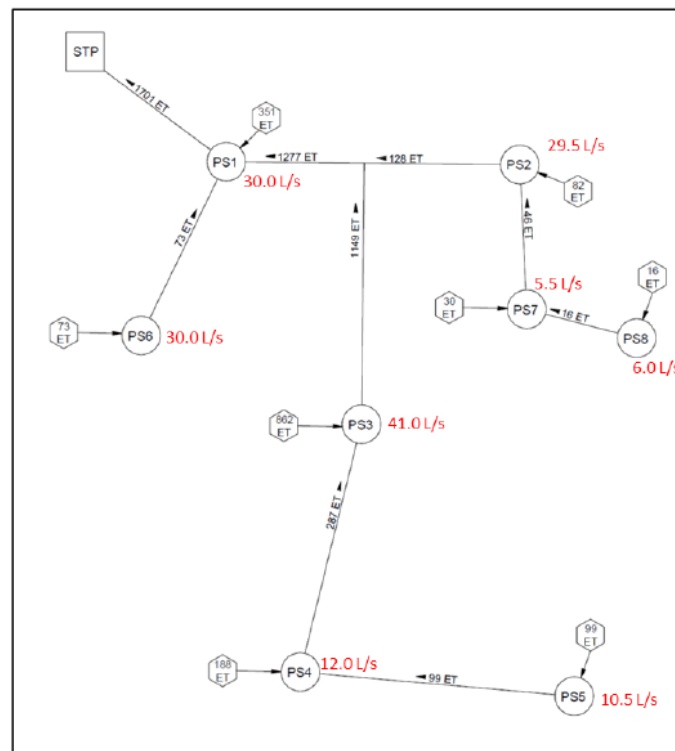


Figure 1.6 Hay Sewage Pump Station Hierarchy

The Hay STP located off Rye Lane was newly built in 2019. It replaced an old trickling filter type treatment plant that was designed in the 1940s and had serious structural as well as performance issues. The newly constructed plant consists of an Intermittent Decanted Extended Aeration (IDEA) tank with a design capacity of 3,500 EP based on a hydraulic allowance of 240 L/EP/d.

The Hay STP operates under the Environmental Protection Licence (EPL) number 3520. Under this licence there are no load or concentration limits required as effluent is discharged to evaporation ponds on site and not to any receiving waters, however monitoring for groundwater contamination is required.

The new STP was built with provision for an effluent reuse scheme to be implemented in the future, however currently no effluent reuse is carried out. Implementation of an effluent reuse scheme is identified as an opportunity to reduce town water demand on raw water.

These assets are documented in Council's Water and Sewer Asset Management Plans, which identify condition, risk, lifecycle costs and renewal priorities.

3.4 Water Losses

Hay's existing water infrastructure faces challenges associated with outdated analogue metering, network inefficiencies, and rising demand from expanding industries. With increasing population growth, construction activity, and industrial investment, the capacity of the current water management system is under strain. Water losses due to inefficiencies in metering and leak detection translate into financial and resource waste, limiting the Council's ability to allocate water where it is needed most.

Hay is at the centre of the South West Renewable Energy Zone (SWREZ), which is driving economic expansion in the region. Large-scale infrastructure projects, such as wind farms, require secure and well-managed water resources to support construction and operation. Without improvements in water monitoring and distribution, Hay risks being unable to meet industry needs, limiting the ability to attract and retain investment.

The current system relies on manual meter reading, which is labour-intensive, prone to errors, and incapable of providing timely data on water usage. The inability to detect leaks and unauthorised consumption in real time contributes to significant financial loss to the community. Water network losses are currently conservatively estimated at 30%, equating to 383 megalitres annually and representing a financial loss of approximately \$408,738 per year. These losses reduce the efficiency of water distribution and increase operational costs for businesses and residents.

The transition to digital water metering provides a necessary solution that allows for better monitoring, planning, and cost recovery, ensuring that the region can continue to grow without compromising water security.

3.5 Financial Position

Hay Shire Council operates its water and sewer services as separate, self-funding Local Water Utilities in accordance with NSW legislative and regulatory requirements. The Water and Sewer Funds are independently accounted for from Council's General Fund to ensure transparency, full cost recovery, and long-term financial sustainability. Services are primarily funded through user charges, developer contributions, interest earnings, and grant funding, with pricing structured in line with IPART principles to balance affordability with the true cost of service delivery.

Revenue generated within each fund is retained exclusively for water and sewer purposes, supporting operations, maintenance, regulatory compliance, and infrastructure renewal. Council applies long-term financial and asset management planning to ensure infrastructure investment is aligned with service demand, risk, and asset life. Cash reserves and prudent borrowing are used to manage operational risk and support intergenerational equity, ensuring reliable, compliant water and sewer services for the community now and into the future.

As at 30 June 2025, the financial position for each fund is as follows:

- **Water Fund:** \$32.32M asset value and available cash of \$3.05M
- **Sewer Fund:** \$30.225M asset value and available cash of \$2.88M

For the 2024/25 financial year, the following operating results were observed:

- **Water Fund:** Deficit \$124,000
- **Sewer Fund:** Deficit \$351,000

The Long-Term Financial Plan adopted in June 2025 provided the following forecast:

Water Fund:

Hay Shire Council Water Fund Income Statement										
Budget Item	2025/2026 Budget	2026/2027 Budget	2027/2028 Budget	2028/2029 Budget	2029/2030 Budget	2030/2031 Budget	2031/2032 Budget	2032/2033 Budget	2033/2034 Budget	2034/2035 Budget
Income from Continuing Operations										
Revenue										
Rates & Charges	840,000	882,500	927,150	974,058	1,023,335	1,075,102	1,129,482	1,186,606	1,246,612	1,309,642
User Charges and Fees	545,000	558,625	572,250	585,875	599,500	613,125	626,750	640,375	654,000	667,625
Grants & Subsidies Recurrent	11,000	11,275	11,550	11,825	12,100	12,375	12,650	12,925	13,200	13,475
Interest	55,000	51,875	48,750	49,375	50,000	50,625	51,250	51,875	52,500	53,125
Other	10,000	10,250	10,500	10,750	11,000	11,250	11,500	11,750	12,000	12,250
Total Income from Continuing Operations	1,461,000	1,514,525	1,570,200	1,631,883	1,695,935	1,762,477	1,831,632	1,903,531	1,978,312	2,056,117
Expenditure										
Employee Costs	249,400	255,635	261,870	268,105	274,340	280,575	286,810	293,045	299,280	305,515
Depreciation	405,000	415,125	425,250	435,375	445,500	455,625	465,750	475,875	486,000	496,125
Other Costs										
Materials and Services	806,600	826,763	846,930	867,096	887,260	907,424	927,590	947,756	967,920	988,086
Borrowing Costs										
Total Expenses from Continuing Operations	1,461,000	1,497,523	1,534,050	1,570,576	1,607,100	1,643,624	1,680,150	1,716,676	1,753,200	1,789,726
Net Operating Result For the Year	0	17,002	36,150	61,307	88,835	118,853	151,482	186,855	225,112	266,391
Net Operating Result Before Grants and Contributions provided for Capital Purposes	0	17,002	36,150	61,307	88,835	118,853	151,482	186,855	225,112	266,391

Sewer Fund:

Hay Shire Council Sewer Fund Income Statement										
Budget Item	2025/2026 Budget	2026/2027 Budget	2027/2028 Budget	2028/2029 Budget	2029/2030 Budget	2030/2031 Budget	2031/2032 Budget	2032/2033 Budget	2033/2034 Budget	2034/2035 Budget
Income from Continuing Operations										
Revenue										
Rates & Charges	1,111,752	1,167,848	1,226,772	1,288,265	1,353,686	1,421,979	1,493,713	1,569,059	1,648,196	1,731,316
User Charges and Fees	45,000	46,125	47,250	48,375	49,500	50,625	51,750	52,875	54,000	55,125
Grants & Subsidies Recurrent	11,500	11,787	12,075	12,362	12,650	12,938	13,225	13,512	13,800	14,088
Interest & Investment Income	75,000	67,875	60,750	61,125	61,500	61,875	62,250	62,625	63,000	63,375
Capital Grants Received										
Total Income from Continuing Operations	1,243,252	1,293,635	1,346,847	1,410,127	1,477,336	1,547,417	1,620,938	1,698,071	1,778,996	1,863,904
Expenditure										
Employee Costs	160,025	164,025	168,026	172,027	176,027	180,028	184,028	188,030	192,030	196,030
Depreciation	420,000	430,500	441,000	451,500	462,000	472,500	483,000	493,500	504,000	514,500
Other Costs										
Materials and Services	524,075	537,176	550,279	563,381	576,483	589,584	602,685	615,789	628,890	641,993
Borrowing Costs	14,908	10,487	5,919	1,199						
Total Expenses from Continuing Operations	1,119,008	1,142,188	1,165,224	1,188,107	1,214,510	1,242,112	1,269,713	1,297,319	1,324,920	1,352,523
Net Operating Result For the Year	124,244	151,447	181,623	222,020	262,826	305,305	351,225	400,752	454,076	511,381
Net Operating Result Before Grants and Contributions provided for Capital Purposes	124,244	151,447	181,623	222,020	262,826	305,305	351,225	400,752	454,076	511,381

Overall, the Water Fund is trending negatively and requires intervention, particularly to address revenue adequacy and long-term financial sustainability. Current income levels are not sufficient to fully support operating costs, compliance requirements, and ongoing asset renewal without corrective action. In contrast, the Sewer Fund remains financially stable and, in the absence of significant one-off expenditures, is able to operate sustainably under its existing funding and cost structure. This distinction indicates a need for targeted financial and pricing responses specific to the Water Fund, while maintaining the current approach for sewer services.

3.6 Asset Management Plans

Effective asset and infrastructure management is central to Hay Shire Council's long-term financial sustainability. This strategy focuses on maintaining water and sewer assets in a fit-for-purpose condition, prioritising renewals, and integrating asset planning with financial decision-making to ensure that the community receives sustainable, reliable, and safe services.

The following is an overview of Council's water and sewer assets as at April 2025:

3.6.1 Water:

The Water Assets are valued at \$31.046M and are apportioned into asset categories as detailed in the table below:

Water Assets Summary

Asset Type	Replacement Value
	(June 2024)
Intake Works	2,233,114
Mains	16,375,402
Reservoirs	6,182,015
Treatment Plant	16,375,402
<i>Total</i>	<i>31,046,531</i>

Asset Condition

65% of Council's assets are in excellent or good condition with the remaining 35% in either satisfactory or poor condition. Council's water mains and treatment plant are the areas in most need of attention.

Demand

Factors affecting demand include population change, changes in demographics, seasonal factors, vehicle ownership, consumer preferences and expectations, economic factors, agricultural practices and environmental. Specific to Council, the demand factor that may impact on service delivery are summarised in the following table:

Demand Driver	Current Position	Projected Position	Potential Impact	Response Required
Industry/Infrastructure	Increase in infrastructure spend and industry	Predicted to increase significantly with the renewable energy transition	Have a large impact on our water supply service	Council to monitor project impact and respond accordingly

Long -Term Financial Plan Summary

The LTFP funding available for operations, maintenance and infrastructure renewals is shown in the table below.

The total allocation over the term of the LTFP is \$9.06M or \$.906M per annum.

Financial Year Ending	New/Upgrade	Renewals	Operations & Maintenance	Total
2025/26		437,000	553,000	990,000
2026/27		424,000	566,825	990,825
2027/28		290,425	580,650	871,075
2028/29		154,466	594,475	748,941
2029/30		219,568	608,300	827,868
2030/31		224,796	622,125	846,921
2031/32		255,136	635,950	891,086
2032/33		235,593	649,775	885,368
2033/34		181,173	663,600	844,773
2034/35		486,882	677,425	1,164,307
<i>Total</i>		<i>2,909,039</i>	<i>6,152,125</i>	<i>9,061,164</i>

The current LTFP shows a capital renewal expenditure spend of \$2,909,039, well short of that required based on consumption of \$450,000 per annum. This is 70% of the current calculated renewal expenditure over the life of the LTFP. The shortfall is attributed to an underspend on watermain renewals. This requires further assessment and addressing the next version of this AMP.

While the operations and maintenance are largely funded over the life of the LTFP, continued assessment is required in the process of dissecting and calculating its actual and required operational and maintenance costs, including assessment on water sales/consumption.

Evaluation of findings

Whilst Council does not have any high-risk water assets it does have a number that require renewal works to ensure that they remain in at least a satisfactory condition. Council's: assessed renewal and maintenance works can be financed within existing pricing structures revenue policies however growth assets and new requirements would need a reassessment of pricing strategies.

Way Forward

1. Comprehensive risk analysis be conducted on assets in relation to criticality and asset condition, particularly around watermain condition.
2. Evaluation of maintenance and operational costs and requirements to calculate maintenance ratio
3. Further development of asset inspection, coordination analysis and asset management techniques
4. Establish asset management planning regime and responsibilities

Analysis of revenue from water sales, particularly around non-revenue water loss and meter reading.

3.6.2 Sewerage:

The Sewerage Assets are valued at \$29.35M and are apportioned into asset categories as detailed in the table below.

Sewerage Assets Summary

Asset Type	Replacement Value (June 2024)
Treatment Plant	\$8,506,500
Pump Station	\$3,864,100
Sewer Mains & Points	\$16,984,030
Total	\$29,354,530

Asset Condition

Generally, 95% of Council's Sewerage Assets are in "as New", "Good" or "Fair" condition. The assets in very poor condition represent 5% (less than \$1M) of the Sewerage asset base.

Long -Term Financial Plan Summary

The LTFP funding available for New/upgrade, operations, maintenance and infrastructure renewals is shown in the following table. The total allocation over the term of the LTFP is \$11.63M or \$1.63M per annum

Financial Year	Operations & Maintenance	Renewals	Total
Ending			
2025/26	\$408,600	\$318,000	\$726,600
2026/27	\$418,815	\$412,500	\$731,315
2027/28	\$429,030	\$340,000	\$769,030
2028/29	\$439,245	\$276,000	\$715,245
2029/30	\$449,460	\$327,000	\$776,460
2030/31	\$459,675	\$277,000	\$736,675

2031/32	\$469,890	\$298,000	\$767,890
2032/33	\$480,105	\$258,000	\$738,105
2033/34	\$490,320	\$259,000	\$749,320
2034/35	\$500,535	\$259,000	\$759,535
<i>Total</i>	<i>\$4,545,675</i>	<i>\$3,024,500</i>	<i>\$7,570,175</i>

The new/upgrade CAPEX allowance is to fund planning, design and construction activities relating to the sewerage treatment plant project.

The current LTFP shows a total planned expenditure on both operations/maintenance and capital renewal of \$7,570,175. This amount is to be funded from Council sources.

The allocation in the LTFP is considered satisfactory for the ongoing operations and maintenance of the sewerage network. The current LTFP shows a capital renewal expenditure spend of \$3,024,500, well short of that required based on consumption. While this is satisfactory in the short to medium term, this requires continued further analysis and understanding. The main risk rests with mechanical and electrical components of the networks (i.e. areas with shorter lifecycles).

3.7 Key Challenges

The Local Water Utility operates in a challenging environment, including:

- Ongoing financial sustainability in the medium to long term with increase in operating costs (chemicals, electricity, staffing) and a small revenue base
- Staffing capability particularly around skills and experience
- Ageing infrastructure and an increasing renewal backlog
- Climate risks, including drought, variability in the Murrumbidgee River system, and flood events
- Limited economies of scale inherent in a small rural utility
- Funding constraints and reliance on external grant programs for major capital works
- Increasing regulatory and compliance requirements under NSW Health, the EPA and the Department of Climate Change, Energy, the Environment and Water (DCCEEW)

These challenges require a strategic, risk-based and financially disciplined approach to service delivery and investment.

4. Strategic Objectives

4.1 Safe and Reliable Services

Council will ensure the ongoing provision of safe and reliable water and sewerage services by:

- Maintaining 100 per cent compliance with NSW Health drinking water guidelines
- Maintaining 100 per cent compliance with EPA licence conditions for sewage treatment and effluent discharge
- Strengthening operational monitoring and control through upgraded SCADA and digital telemetry systems
- Ensuring staff capability and training support consistent, high-quality operations
- Continue to pursue a secondary water source system as contingency to the Murrumbidgee River

4.2 Infrastructure Sustainability

To manage assets sustainably over their full lifecycle, Council will:

- Enhance Water and Sewer Asset Management Plans with robust lifecycle costing and risk-based prioritisation, including detailed and thorough condition assessments
- Reduce unaccounted-for water losses to below 10 per cent through leak detection, network renewal and smart metering
- Implement digital metering across the water network to improve demand management and customer transparency
- Prioritise renewal of high-risk water mains, sewer rising mains and pump stations

4.3 Financial Sustainability

Council will maintain financially sustainable water and sewer operations by:

- Aligning pricing with NSW Best-Practice Pricing Guidelines
- Achieving full cost recovery for water and sewer services while balancing affordability for customers
- Strengthening reserve funds to support major asset renewals and drought contingency measures
- Integrating water and sewer financial planning, and asset management, with Council's Long Term Financial Plan

4.4 Environmental Responsibility

The Local Water Utility will minimise its environmental footprint by:

- Reducing water losses and non-revenue water through leak detection, network renewal and smart metering

- Reducing energy consumption and greenhouse gas emissions through efficiency measures and renewable energy options such as solar and battery storage
- Improving effluent management and investigating beneficial reuse opportunities
- Implementing recycled water schemes where feasible for parks, sporting facilities and suitable industrial uses

4.5 Community and Customer Focus

Council will place customers and the community at the centre of service delivery by:

- Improving customer service response times and issue resolution
- Providing customers with access to live or near real-time water usage data through digital metering
- Communicating clearly on service levels, water consumption, planned works and emergency events
- Engaging the community on water efficiency, conservation and drought preparedness

4.6 Resilience and Innovation

To strengthen long-term resilience, Council will:

- Develop and maintain contingency supply plans for drought, flood and emergency events
- Investigate and manage alternative water sources, including groundwater and recycled water
- Collaborate with regional partners on shared services, skills development and innovation
- Leverage digital technology and data to support proactive asset and demand management

5. Strategic Priorities 2026–2036

The strategic priorities outlined below have been structured to directly support eligibility and assessment criteria under the previous NSW Safe and Secure Water Program and any likely successor funding programs. In particular, the priorities demonstrate:

- Risk reduction for public health, environment and service continuity
- Improved drought and climate resilience
- Asset renewal and system redundancy
- Demonstrated financial sustainability and co-contribution capacity

5.1 Immediate Priorities (Years 1–3)

- Improve the operational and financial performance of the Water Fund, including stronger cost understanding and budgeting management practices
- Implement digital water metering across the network
- Complete implementation of telemetry and SCADA systems to enable real-time monitoring and fault detection
- Install solar and battery systems at major energy-use sites, including the water treatment plant, sewage treatment plant and Leonard Street pump station
- Update the Drinking Water Management System in line with regulatory requirements
- Review and update the Drought Management Plan and Emergency Response Plans
- Update the Integrated Water Cycle Management Plan
- Actively pursue funding through the NSW Government programs

5.2 Medium-Term Priorities (Years 4–7)

- Review and update Water and Sewer Asset Management Plans, including detailed and ongoing condition assessments
- Progress WTP and STP automation initiatives, including Critical Control Point (CCP) monitoring
- Commence staged upgrades of sewerage pump stations
- Implement targeted recycled water reuse projects where feasible
- Upgrade the Murray Street pump station to improve resilience to flooding and other natural hazards
- Expand water conservation and efficiency education programs

5.3 Long-Term Priorities (Years 8–10)

- Secure a second water supply source to provide redundancy and system resilience
- Complete the identified major asset renewal backlog
- Increase water storage capacity through new or upgraded reservoirs
- Investigate and implement regional collaboration models for shared services and specialist skills
- Position the Hay Local Water Utility as a case study in rural water innovation, including management practices, digital systems, renewable energy and circular economy principles

6. Strategic Action Plan

This Capital Works Pipeline has been prepared for Council decision-making and financial planning. It provides a grant-ready view of priority projects, consistent with DCCEEW and potential NSW Government programs expectations, while clearly identifying Water and Sewer Fund impacts.

6.1 Capital Works Pipeline (Grant-Ready)

Fund	Project	Strategic Objective	Cost Band (\$)	Indicative Co-contribution	Readiness Rating	Risk Heat-Map Ref	Timeframe	Funding Pathway
Water	Digital Water Metering (Network-wide)	NRW reduction, demand management	\$2M	25–35%	High	High (Service & Financial)	Years 1–3	NSW Gov / Water Fund/Loan
Water/Sewer	SCADA & Telemetry Upgrade	Compliance, early fault detection	\$0.2M	100%	High	High (Public Health)	Years 1–3	Water & Sewer Funds
Water	High-Risk Water Main Renewals (Stage 1–3)	Asset failure risk reduction	\$5M	20–30%	High	High (Service Continuity)	Years 2–10	NSW Gov / LTFP
Water	Murray Street Pump Station Flood Resilience Upgrade	Climate resilience, redundancy	\$1M	25–40%	Medium	Extreme (Climate/Flood)	Years 4–6	NSW Gov /LTFP
Water	Second Water Supply Source (Feasibility & Delivery)	Drought resilience, redundancy	\$5M	30–50%	Low	Extreme (Single Source Risk)	Years 7–10	NSW Gov (Major Works) /LTFP
Sewer	Sewer Pump Station Upgrades (Staged)	Environmental protection, reliability	\$2M	20–30%	Medium	High (EPA Compliance)	Years 3–10	NSW Gov / Sewer Fund

Fund	Project	Strategic Objective	Cost Band (\$)	Indicative Co-contribution	Readiness Rating	Risk Heat-Map Ref	Timeframe	Funding Pathway
Sewer	Sewer Rising Main Renewals	Failure and spill prevention	\$2M	20–30%	Medium	High (Environmental)	Years 3–10	NSW Gov /LTFP
Water/ Sewer	Energy Efficiency (Solar/Battery)	Cost reduction, emissions	\$0.3M	25–35%	High	Medium (Financial)	Years 1–4	CEUF / Renewables / LTFP
Water/ Sewer	Full automation of treatment plants	Reduce human error, efficiency	\$3M	25-35%	Low	High (Public Health & Service Continuity)	Years 4-7	NSW Gov /LTFP
Water	Increase Water Storage	System resilience & Redundancy	\$3M	25-35%	Low	Medium (Service Continuity)	8-10	NSW Gov /LTFP/ Renewables

Readiness rating considers business case maturity, AMP alignment, approvals status and delivery capacity.

6.2 Priority Projects Shortlist

The following projects are recommended as Council's priority submissions under the NSW Government programs and other funding streams. These projects present the strongest alignment with risk reduction, community benefit and funding assessment criteria.

Priority Project Shortlist (Top 5)

1. **Digital Water Metering Program**
Delivers immediate NRW reduction, increase revenue, demand visibility, customer transparency and long-term operational savings.
2. **SCADA and Telemetry System Upgrade**
Directly reduces public health and service continuity risks through real-time monitoring and alarms.
3. **Murray Street Pump Station Flood Resilience Upgrade**
Addresses an extreme climate risk and protects Hay's sole surface water source.
4. **High-Risk Water Main Renewal Program**
Targets known asset failures, water losses and service disruptions based on AMP risk profiling.
5. **Energy Efficiency Upgrades**
Reduces operational costs and emissions while improving system resilience.

6.3 Financial and Planning Integration

These projects are:

- Directly drawn from Council's Water and Sewer Asset Management Plans
- Reflected in Council's Long Term Financial Plan as staged capital works
- Structured to maximise external grant funding while maintaining prudent co-contribution levels
- Sequenced to match organisational delivery capacity and regulatory risk priorities

This approach provides Council with assurance that investment decisions are evidence-based, financially responsible and aligned with State funding expectations.

7. Governance and Compliance

7.1 Regulatory Framework

Council operates the Local Water Utility in accordance with:

- Local Government Act 1993
- Water Management Act 2000
- Water Management (Water Supply Authorities) Regulation 2025
- Water Management (General) Regulation 2025
- The NSW Local Water Utilities Regulatory and Assurance Framework (RAF)
- NSW Health drinking water requirements
- EPA licensing and environmental protection obligations

7.2 Governance

Governance arrangements include:

- Annual compliance and performance reporting to regulators
- Transparent reporting to Council and the community through Annual Reports and performance dashboards
- Clear internal accountability for operational, financial and compliance outcomes

8. Strengthening Financial Management

Hay Shire Council is committed to improving the financial management of its Local Water Utility to ensure the long-term sustainability of both Water and Sewer Funds. Financial planning is closely integrated with the Council's Long Term Financial Plan (LTFP), which:

- Provides detailed projections of operating and capital expenditure for both funds.
- Supports pricing strategies aligned with NSW Best-Practice Pricing Guidelines to ensure revenue adequately covers the full cost of service delivery.
- Targets improved operating results to fully fund depreciation, asset renewals, co-contributions, and emergency response requirements.

Capital investment and renewal priorities are informed by Council's Water and Sewer Asset Management Plans, which:

- Assess asset condition, risk, and remaining useful life to guide investment decisions.
- Apply lifecycle costing to optimise timing and efficiency of renewals.
- Integrate directly with the LTFP to align infrastructure delivery with financial capacity.

Key measures to strengthen financial management include:

- Developing improved capability and processes for budgeting and management
- Reviewing and adjusting pricing structures to reflect full cost recovery while maintaining affordability.
- Addressing non-revenue water and water losses to improve Water Fund revenue.
- Maintaining a diversified funding mix, including user charges, developer contributions, government grants, and internal reserves.
- Targeting positive operating results for both Water and Sewer Funds to sustain operations and support reinvestment in infrastructure.

In addition, the planned implementation of digital water metering is expected to improve financial management by reducing water losses, increasing billing accuracy, and optimising resource allocation. With a Benefit-Cost Ratio of 1.76, this initiative will generate measurable economic returns and allow reinvestment in critical infrastructure, reinforcing the long-term resilience and sustainability of the Local Water Utility.

Ongoing monitoring, modelling, and alignment with the LTFP will ensure that both Water and Sewer Funds are managed efficiently, transparently, and sustainably, providing a robust financial foundation for reliable service delivery.

9. Strengthening Asset Management

Asset Management Plans inform the timing, scope, and funding of renewal, maintenance, and replacement works, ensuring lifecycle costs are accurately forecast and aligned with available resources. Regular reviews allow emerging risks, service demand, regulatory requirements, and financial constraints to be incorporated into forward budgets, supporting long-term service reliability and alignment with the Community Strategic Plan.

Key measures to strengthen asset management include:

Integrated Planning:

- Asset Management Plans (AMPs) are fully aligned with the Long-Term Financial Plan (LTFP) to ensure renewal, maintenance, and replacement needs are accurately costed, prioritised, and funded.
- Planning is regularly updated to reflect emerging risks, service demand, demographic changes, regulatory requirements, and financial constraints.

Renewals Focus:

- Prioritise renewal and optimisation of existing assets over new infrastructure to protect past investment and reduce unfunded maintenance liabilities.
- New assets are only delivered where a demonstrated community need exists, supported by robust business cases and sustainable funding, including system redundancy and resilience.

Lifecycle and Risk-Based Decision-Making:

- All projects are assessed using whole-of-life costing to ensure affordability and long-term sustainability.
- Renewal and maintenance programs are prioritised based on service risk, safety, and financial exposure.

Infrastructure Backlog Management:

- Regular monitoring of asset condition and backlog levels identifies high-risk assets and informs targeted investment.
- Renewal funding, efficiency savings, and grants are strategically applied to address backlog issues and optimise long-term performance.

Strengthened Asset Capability:

- Robust condition assessments, performance monitoring, and data collection underpin evidence-based decision-making.
- Ongoing staff training, workforce planning, and knowledge sharing ensure Council maintains the technical capability to manage assets effectively.



Figure 1.7 Strengthening Asset Management

These measures collectively ensure the water and sewer network remains safe, reliable, and resilient, delivering long-term value to the Hay community.

10. Risk Management

10.1 NSW Government Regulatory and Assurance Framework

Hay Shire Council's Local Water Utility operates within the Council's assurance framework, which provides clear guidance on public health, environmental protection, and financial accountability. Key legislative and policy instruments, including the Water Management Act 2000, the Water Supply (Critical Needs) Act 2019, and IPART pricing and performance guidelines, underpin the delivery of safe, reliable, and sustainable water and sewer services. Compliance with these frameworks ensures that Council meets community expectations, regulatory obligations, and reporting requirements, while demonstrating sound governance and financial management.

Strategic planning is central to Hay Shire Council's ability to manage risks and optimise outcomes for the community. Evidence-based planning enables Council to identify and mitigate key risks associated with:

- **Water security:** ensuring reliable supply for Hay under drought and climate variability;
- **Water quality:** maintaining safe drinking water and effective treatment processes;
- **Environmental protection:** safeguarding catchments, rivers, and wastewater impacts;
- **Assets and infrastructure:** prioritising renewals, upgrades, and long-term maintenance of water and sewer systems;
- **Customers:** balancing service reliability, accessibility, and affordability; and
- **Financial sustainability:** ensuring the Water and Sewer Funds remain viable to support ongoing operations, capital works, and risk mitigation.

Through integrated strategic planning aligned with NSW regulatory and assurance requirements, Hay Shire Council ensures that its Local Water Utility makes informed, transparent decisions that deliver safe, resilient, and financially sustainable water and sewer services for the community now and into the future.

10.2 Risk Management Framework

Hay Shire Council recognises that effective risk management is critical to ensuring the sustainability, reliability, and compliance of its Local Water Utility. Risks are assessed across service delivery, public health, asset management, environmental protection, and financial sustainability, with mitigation strategies embedded in operational planning and capital investment decisions.

10.2.1. Capital Works Pipeline Risks

Council's planned capital works, particularly projects that are grant-ready or co-funded, are critical to maintaining service continuity, compliance, and resilience. Key risks associated with the capital works pipeline include:

- **Project Delivery Risk** – Delays or cost overruns for high-value projects, such as High-Risk Water Main Renewals (\$5M) and the Second Water Supply Source (\$5M), may impact service continuity and planned infrastructure upgrades. Projects with low readiness ratings or extreme hazard exposure (e.g. flood or drought resilience works) carry higher risk of schedule slippage.
- **Financial Exposure** – Many projects require co-contributions or loans. Uncertainty in grant funding or revenue shortfalls in the Water Fund could delay implementation, particularly for large-scale digital water metering and water main renewal projects.
- **Service and Compliance Risk** – Delays in SCADA & Telemetry upgrades or treatment plant automation could compromise early fault detection, public health protection, and operational efficiency.
- **Climate and Environmental Risk** – Projects addressing flood resilience, drought redundancy, and energy efficiency (solar/battery integration) are subject to environmental and climate uncertainties, which may affect cost and delivery timing.

10.2.2. Operational and Public Health Risks

Operational risks are actively monitored, informed by internal assessments, NSW Health advice (2020), and audit findings:

- **Water Quality Risk** – Identified risk of chlorine-sensitive pathogen contamination requires treatment upgrades and enhanced process monitoring to maintain primary disinfection barriers. (Risk ID 2101, score 4)
- **Water Security Risk** – Current water security deficiency indicates potential restrictions during dry periods, impacting over 1,000 residents. (Risk ID 1195, score 3)
- **Environmental Risk (Sewer)** – Current sewer infrastructure is low risk, with high-condition assets and minimal deficiency (Risk ID 3148, score 1), though ongoing monitoring and maintenance are required to maintain compliance and environmental protection.
- **Cryptosporidium Risk** – Preliminary assessment rates the Hay filtered water system as medium risk; implementation of online turbidity monitoring is recommended to strengthen protection and reduce reliance on manual checks.

10.2.3. Financial Management Risks

The financial sustainability of both Water and Sewer Funds is closely linked to effective risk management:

- **Revenue Risk (Water Fund)** – Revenue shortfalls due to non-revenue water, water losses, or under-recovery of costs could compromise the ability to fund both operational needs and capital projects.
- **Cost Overruns** – Capital works with high co-contributions or extended timelines may exceed forecast budgets, particularly if grant funding is delayed or conditions change.

- **Debt and Borrowing Risk** – Reliance on loans for high-value projects requires careful cash flow planning to avoid adverse impacts on the operating result or intergenerational equity.
- **Operational Efficiency Risk** – Delays in digital water metering and automation projects could reduce anticipated savings, affecting fund sustainability and reinvestment capacity.
- **Funding Mix Risk** – Dependence on a combination of user charges, developer contributions, and grant funding exposes the utility to external funding volatility, necessitating regular review of pricing, cost recovery, and reserve levels.

10.2.4. Risk Mitigation Strategies

Council employs a range of mitigation measures to address identified risks:

- Rigorous project prioritisation and readiness assessment for all capital works, linked to strategic objectives and grant eligibility.
- Regular integration of asset management plans with the LTFP to align capital investment, operational expenditure, and funding capacity.
- Enhanced monitoring and control measures for water quality, including treatment upgrades and real-time turbidity monitoring.
- Targeted revenue improvement programs, including addressing non-revenue water, optimising billing accuracy, and reviewing pricing structures for affordability and full cost recovery.
- Contingency planning and phased project delivery for high-risk or climate-exposed assets to manage financial and service continuity risks.

By integrating operational, capital, public health, and financial considerations into a unified risk framework, Hay Shire Council ensures that its Local Water Utility is resilient, sustainable, and able to deliver safe, reliable, and compliant water and sewer services for the community.

10.3 Risk Heat Map Table

Risk Category	Risk Description	Risk ID	Severity Score	Severity Level	Mitigation / Notes
Water Quality	Chlorine-sensitive pathogen contamination in drinking water	2101	4	● High	Upgrade/repair treatment barriers; improve and automate process monitoring
Water Security	Water security deficiency may lead to restrictions during dry periods	1195	3	● Medium	Monitor supply-demand; implement water efficiency and redundancy strategies
Environmental (Sewer)	Sewer reuse and wastewater quality currently low risk	3148	1	● Low	Routine monitoring and maintenance of STP assets
Public Health	Cryptosporidium risk in filtered water system	–	3	● Medium	Install online turbidity monitoring; review filter performance
Service Continuity	High-risk water mains, pump stations, and treatment plant failure risk	–	4	● High	Capital renewal programs; redundancy and automation; SCADA upgrades
Climate / Flood	Flood and climate resilience for key water infrastructure	–	4	● Extreme	Murray St pump station upgrades; resilience planning
Single Source Supply	Dependence on single water supply source	–	4	● Extreme	Feasibility and delivery of second water supply source
Financial / Revenue	Water Fund revenue shortfall, non-revenue water, and cost recovery risk	–	3	● High	Pricing review, NRW reduction, digital metering implementation
Regulatory / Compliance	SCADA & telemetry and treatment plant automation delays may affect compliance	–	3	● High	Timely project delivery, staff training, monitoring
Energy / Emissions	Rising costs or delays in solar/battery energy efficiency projects	–	2	● Medium	Phased implementation, grants, and cost-benefit monitoring

10.4 Risk Heat-Map – Risk Reduction Over Time

The table below illustrates how the strategic capital program progressively reduces key risks facing the Local Water Utility.

Risk Category	Current Risk Level (2026)	Years 1–3	Years 4–7	Years 8–10
Public Health (Drinking Water)	High	Medium	Low	Low
Service Continuity	High	Medium	Medium	Low
Environmental Compliance	High	Medium	Low	Low
Climate / Flood Impacts	Extreme	Extreme	High	Medium
Drought / Supply Security	High	High	Medium	Low
Financial Sustainability	Medium	Medium	Low	Low

Risk levels are based on asset condition, redundancy, compliance exposure and climate vulnerability as identified in Council's Asset Management Plans and risk assessments.

This heat-map demonstrates that early investment focuses on public health, compliance and operational control, with longer-term investments delivering supply redundancy and climate resilience.

11. Monitoring, Implementation and Review

11.1 Implementation Framework

Implementation of this Strategic Plan will be coordinated through Council's annual Operational Plan and Delivery Program, ensuring alignment with budget allocations, resourcing and reporting processes.

11.2 Key Performance Indicators

The following high-level KPIs will be used to monitor performance:

Strategic Area	Key Performance Indicator	Target
Drinking Water Quality	Compliance with NSW Health guidelines	100%
Sewerage Compliance	EPA licence compliance	100%
Water Losses	Unaccounted-for water	<10%
Asset Management	Assets with current AMP coverage	100%
Financial Sustainability	Operating result (Water & Sewer Funds)	Positive
Customer Service	Response to service requests	Within service standards
Energy Efficiency	Reduction in energy consumption	Year-on-year improvement
Resilience	Updated drought and emergency plans	Current and tested

11.3 Review and Continuous Improvement

Implementation of this Strategic Plan will be supported by:

- Annual performance reviews against key performance indicators, including water quality, sewer compliance, customer service and financial performance
- Regular reporting to Council on progress, risks and emerging issues
- A comprehensive four-yearly review aligned with Council's IP&R cycle
- Continuous improvement through asset management refinement, staff training, technology adoption and customer feedback

12. Appendices

The following documents support and inform this Strategic Plan and demonstrate compliance with DCCCEW LWU strategic planning expectations:

- Water and Sewer Asset Management Plans
- Integrated Water Cycle Management Plan
- Hay Water Treatment Plant - Performance Optimisation Report
- Drought Management Plan
- Long Term Financial Plan (Water and Sewer Funds)
- Developer Servicing Plan