Strategic Asset Management Plan

July 2026

This Strategic Asset Management Plan has been produced by Selwyn Water Limited in accordance with the Commerce Act 1986 where it applies to water services information disclosure.

Selwyn Water

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Definitions and acronyms

Definitions and acronyms can be found in the tables below.

Table of definitions

Term	Meaning
Significant/significance	Refer Selwyn Water Significance and Engagement Policy
Strategic Water Services Assets	For a water service provider, (a) means water services infrastructure or another asset or group of assets without which the provider is unable (i) to meet its regulatory requirements; or (ii) to maintain its capacity to achieve the outcomes set out in its water services strategy; and (b) includes an asset or a group of assets listed as strategic water services assets in the provider's significance and engagement policy
Water Services Strategy	Refer section 230 of the Local Government (Water Services) Act 2025.

Table of acronyms

Acronym	Meaning
AMP	Asset Management Plan
Comcom	The Commerce Commission
IDP	Investment and Delivery Plan
IS	Infrastructure Strategy
SAMP	Strategic Asset Management Plan
SDC	Selwyn District Council
WSDP	Water Services Delivery Plan
WSCCO	Water Services Council-Controlled Organisation
WSS	Water Services Strategy

1 Foreword

This Strategic Asset Management Plan should be read in conjunction with the Water Services Strategy, which sets out how Selwyn Water will deliver safe, reliable, and sustainable water services for the district.

Our operating context – CCO establishment and transition

Selwyn Water is now responsible for the delivery of community drinking water and wastewater services across the Waikirikiri Selwyn District. This is an enduring and significant responsibility.

As a newly established organisation, Selwyn Water recognises that the next 12–18 months must focus on establishing performance baselines, improving data quality, and lifting asset management maturity, particularly as information, systems, and practices transition from Selwyn District Council.

During this period, decision-making will progressively shift from reliance on inherited Plans and assumptions to increasingly evidence-based and data-driven approaches.

Selwyn Water is committed to continuous improvement in asset management practice. Over time, this will include:

- Increasing use of data-driven and predictive decision-making
- Refining levels of service and performance measures
- Improving transparency of investment decisions and trade-offs
- Strengthening engagement with mana whenua, communities, and stakeholders

As a newly established organisation, we are building on existing relationships and commitments developed by the Council. Our focus in the establishment phase is to ensure continuity, trust, and clarity of roles, while laying the foundations for deeper and more structured partnerships over time. This includes strengthening relations with regulators, agencies and associations. We are continuing to focus and build on our relationship with mana whenua, Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga.

Asset management approach

The strategic objectives and priorities set out in the Water Services Strategy (WSS) provide the foundation for Selwyn Water's asset management approach. These expectations directly inform how asset-related decisions are prioritised and delivered.

In response, Selwyn Water will:

- Prioritise public health, regulatory compliance, and service continuity as the foundation of all asset management decisions
- Apply a risk-based approach to identify and prioritise investment, focusing on areas of greatest impact to customers, the environment, and the community
- Align infrastructure investment with growth patterns, ensuring that development is supported in a timely and financially sustainable manner
- Balance levels of service, resilience, and affordability, recognising that not all investment needs can be met simultaneously

- Optimise the use of existing assets through lifecycle management, including maintenance, renewals, and demand management
- Recognise the partnerships including with mana whenua and integration of the Waiora One Water strategy.

Future strategic focus areas

As a newly established organisation, Selwyn Water is continuing to develop its asset management capability. Over the next 12–18 months, the focus will be on:

- Improving asset data quality and system integration
- Strengthening asset management processes and tools
- Building organisational capability

In parallel with re-establishing and improving our core services, we will progressively assess opportunities to strengthen long-term resilience, sustainability, and system performance. This includes investigating:

a) Energy and carbon

- Opportunities to reduce reliance on fossil fuels in operations
- Use of battery storage and alternative energy systems to support critical infrastructure
- Contribution to electricity system resilience, including peak demand management

b) Network resilience and water security

- Development of more integrated and flexible water networks
- Assessment of alternative water sources, including potential use of irrigation schemes during emergency events

c) Digitalisation and data

- Progressive digitalisation of network infrastructure and asset systems
- Improved detection of leaks and system inefficiencies
- Enhanced billing accuracy and operational performance
- Providing customers with real-time or near real-time water usage information to support reduced consumption

d) External environment and supply chain resilience

- Consideration of the geopolitical environment, including supply chain risks and energy security, in long-term planning and investment decisions

These areas represent strategic intentions, with feasibility, costs, and benefits still to be assessed and prioritised alongside core service requirements.

2 Purpose, scope and alignment

2.1 Purpose

The primary purpose of any strategic asset management plan (SAMP) is to translate top-down objectives (such as those in the WSS) into actionable tasks and measures, informed by bottom-up realities. This translation purpose is achieved mainly through Sections "6.3 Portfolio Asset Management Objectives" and "6.4 Strategic Objectives for Asset Management Capability."

In the context of the NZ water industry's new information disclosure requirements (Commerce Commission Feb. 2026), the SAMP provides a critical link between the WSS, the Asset Management Plans (AMPs), the Infrastructure Delivery Plan (IDP), and day-to-day decisions.

This SAMP also documents Selwyn Water's approach to asset management at a high level, touching on key domains of asset management practice. This "approach" includes the asset management framework, asset management objectives, LOS framework, Risk framework, forecasting methodology, prioritisation, and asset management performance. It documents how these practice areas are currently applied at Selwyn Water and how asset management activities can be further optimised or improved. Many of these frameworks are to be confirmed, and in this respect this SAMP just serves to document our current baseline.

2.2 Scope

This SAMP applies to Selwyn Water's drinking water and wastewater services.

It sets out the strategic approach to managing these asset systems across their lifecycle, including planning, delivery, operation, maintenance, and renewal (or disposal). It also guides the use and improvement of asset management enablers such as information systems and asset models.

This SAMP outlines our operating context, asset management framework (including the role of governance and leadership), asset lifecycle strategies, and risk management. Most importantly, it includes Selwyn Water's Asset Management Objectives which serve to translate the WSS objectives into actions to be delivered by the Asset Management System.

We will review and update this SAMP in 12 months.

This is Selwyn Water's first Strategic Asset Management Plan (SAMP). Critically, as Selwyn Water's first SAMP, it relies on documents and practices that have been transferred from Selwyn District Council (SDC). These will be reviewed and amended as needed to meet the objectives and strategy requirements of SWL over time. This SAMP also references asset management best practices from Āpōpō and international asset management guidance references which have yet to be fully integrated into Selwyn Water's operations.

The SAMP focuses on:

- How asset management activities are organised and delivered at Selwyn Water
- Selwyn Water's high-level approach to key domains of asset management practice
- The key service outcomes that govern how "value" is realised through Selwyn Water assets and their management
- How asset-related decisions are prioritised and aligned with organisational objectives

The SAMP does not include detailed asset inventories, condition data, or detailed tactical plans. These are addressed in Asset Management Plans (AMPs), the Infrastructure Delivery Plan (IDP), and supporting technical documents.

Stormwater, land drainage, and water race services remain outside the scope of this SAMP as these are managed by Selwyn District Council.

2.3 Integration and update cycle

The SAMP will form part of Selwyn Water's integrated planning and reporting framework and be closely aligned with future Water Services Strategies (WSS), Asset Management Plans (AMPs), and Infrastructure Delivery Plans (IDPs).

The SAMP will be updated regularly to ensure continued alignment with:

- The WSS and its strategic direction
- Commerce Commission information disclosure requirements
- Selwyn Water's current operational context, including stakeholder expectations, demand forecasts, and new legislation

The SAMP will be reviewed and updated at least annually during the establishment phase, with a formal update aligned to the WSS review cycle.

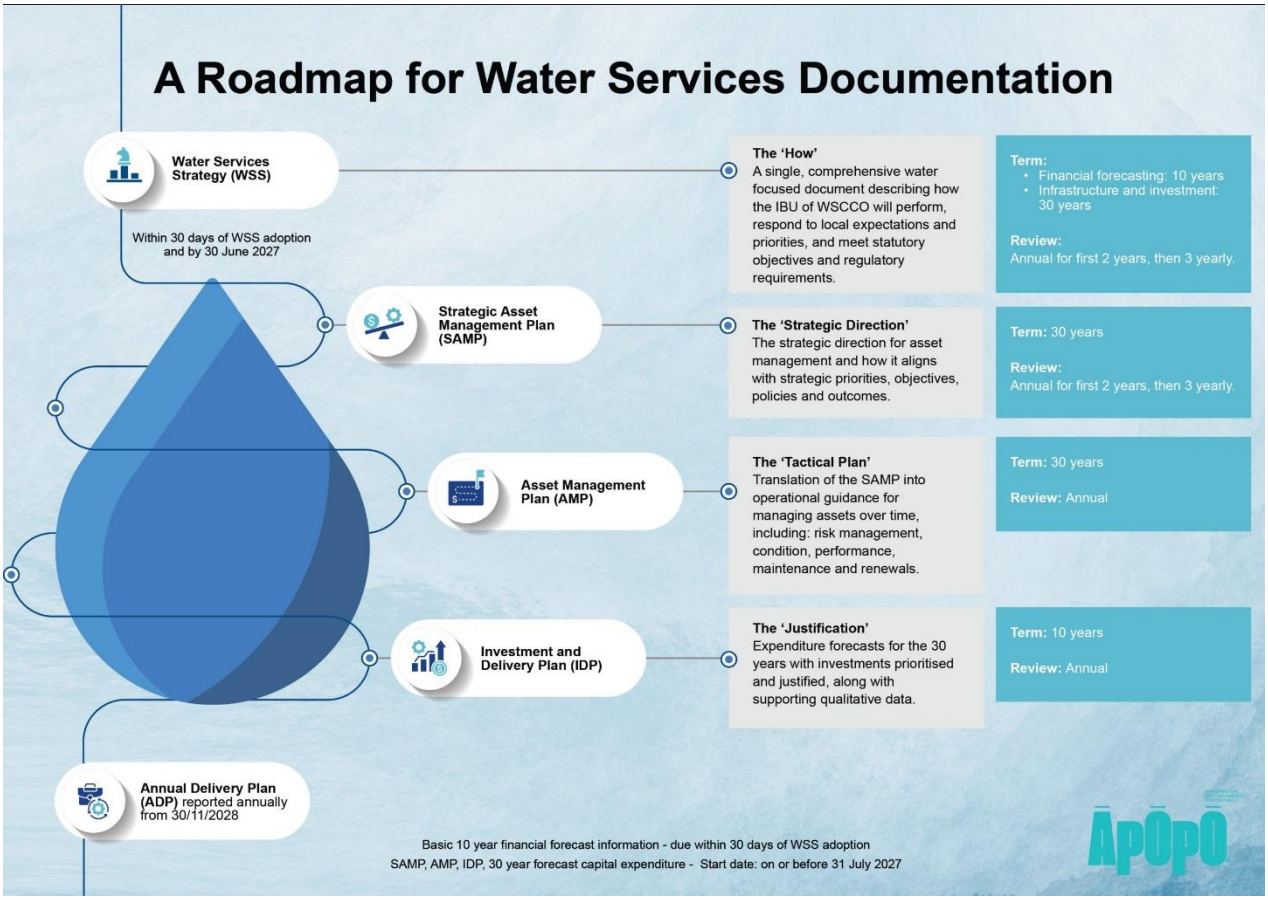
2.4 Document hierarchy

The relationship between the three key documents required by The Commerce Commission is outlined in **Figure *1***.

- The Water Services Strategy (WSS) articulates desired outcomes for the whole organisation, specifies performance measures and targets, and provides financial forecasts and analysis
- The SAMP translates these outcomes into specific programmes or initiatives, with defined and measurable outputs.
- Asset Management Plans (AMPs) and the Infrastructure Delivery Plan (IDP) provide detailed action plans and improvements registers while also documenting the current state in high detail.

This structure provides a transparent reporting framework connecting organisational objectives and revenue settings through to individual asset-related decisions.

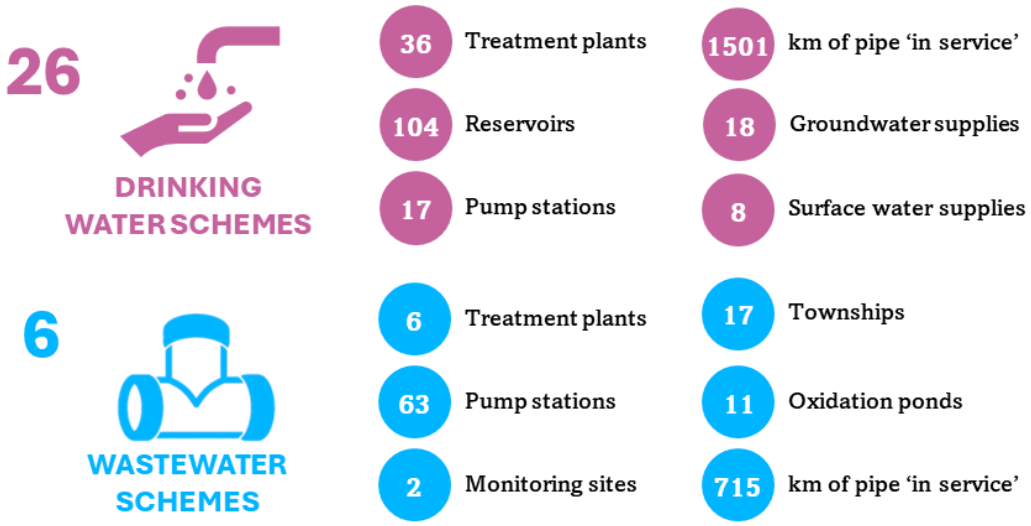
Figure 1: Strategic Asset Management Plan – Relationship with supporting documents



3 The asset base

Our drinking water and wastewater assets are described in **Figure 2**. Detailed information can be found in the AMPs.

Figure 2: Drinking water and wastewater assets, Water Services Delivery Plan (2025)



An outline of the drinking water and wastewater services is provided below.

Drinking Water. The community drinking water service has the following general attributes:

- Source water is predominantly taken from deep groundwater bores in the lower plains, with some upper plains/alpine areas relying on stream sources
- Reservoirs form a critical part of most schemes are used to meet peak demand and during unavailability of sources e.g., pump replacement and provide continuity of supply to customer during adverse events such as floods and long duration power outage events
- SCADA and telemetry are an essential backbone of all systems, providing compliance and operational data, with SWL continuing to invest in specialists and technology
- Treatment including ultraviolet light and chlorination is standard across all schemes

Wastewater. The community wastewater service has the following general attributes:

- Gravity and pressure/pumping conveyance of household and commercial wastes to local pumpstations
- Bulk/pressure mains transport to a treatment plant, whether a short distance e.g., Claremont or from multiple locations e.g., Kirwee, Prebbleton, Lincoln to the Pines Rolleston
- The Selwyn wastewater scheme pumps is the largest and most complex of all SWL's wastewater schemes, supporting 80% of all connection flows and loads to the Rolleston Pines WWTP.
- As with drinking water, SCADA and telemetry are an essential backbone of all systems, providing compliance and operational data
- Treatment and disposal of wastes occurs to air, land and water (Lake Coleridge only)

- The Christchurch City network is essential for meeting the needs of Tai Tapu, with a 1997 agreement enabling this discharge to occur. There are also two other pipelines into CCC, one of which also remains active and is utilised under agreement

These asset characteristics highlight several key considerations for Selwyn Water:

- Limited redundancy in smaller schemes increases service disruption risk
- Reliance on critical treatment and telemetry systems
- Growth places increasing pressure on network capacity and debt headroom

3.1 Resilience and redundancy (current state)

There is limited redundancy in Selwyn's smaller, standalone water supplies and wastewater schemes. The resilience of these small schemes is dependent on quick response times and proactive planning by Selwyn Water and our contractor Corde. Larger schemes have some redundancy and resilience to minor asset failure events so long as these do not occur during periods of peak network demand. We have recognised the importance of resilient services and plan to evaluate assets' risk and resilience further, to inform future investment plans.

3.2 Network models

Capacity

A calibrated water network model provides us with high level capacity information. A calibrated wastewater network model provides us with capacity information for major pipelines and pump stations. These models are then used to identify where upgrades are needed to enable growth.

Condition (renewals)

We have a network renewals model which provides replacement scenarios, controlled by funding caps, age and specific requirements including a focus on replacement of asbestos cement and leaky pipes. This is updated every two years.

3.3 Non-network assets

We rely on external suppliers to provide software, hosting, security and helpdesk support. Our small vehicle fleet is required to maintain telemetry and respond to emergency and critical events.

Operations and maintenance

We have in-house SCADA/Telemetry staff, with all day-to-day operations and maintenance of water assets is provided by CORDE Ltd. CORDE Ltd have fleet vehicles which they procure and manage within ISO14000 (Environmental Management) and ISO9000 (Quality Management) policies. These services are provided under a Term Service Contract.

Our staff supervise the outputs and provide direction and approval for funding including capital, renewals and operations (reactive) works.

4 Significant assumptions

Significance is defined in Selwyn Water's Significance and Engagement Policy.

The following tables summarises key assumptions made in the preparation of this SAMP.

Assumption	Reason for Significance	Qualifications
Growth continues broadly in line with projections, requiring capital and operational programmes to be delivered at the necessary scale and timing	Direct impact on investment requirements, debt levels, and affordability (revenues and costs)	Past projections have often underestimated growth, leading to under-investment and operational pressure
Asset management and investment decisions are based on data of sufficient quality and reliability	Data quality directly influences levels of service, investment efficiency, and cost outcomes	Current data has gaps in completeness and accuracy, affecting asset modelling, planning, and decision-making
Core governance and asset management documents (including the Asset Management Policy and SAMP) are adopted and implemented	Critical for regulatory compliance, organisational credibility, and delivery of asset management objectives	Historically, resourcing has been insufficient to achieve the required level of asset management maturity
That investment decisions will need to balance competing priorities, including compliance, service levels, growth, and affordability	Directly influences the timing, scope, and sequencing of capital investment and associated customer charges	Not all investment needs can be met simultaneously; decisions will require trade-offs supported by evolving data and prioritisation frameworks
That regulatory requirements will continue to evolve over time	May require changes to asset standards, operating practices, and investment levels	Future regulatory requirements are uncertain and may increase investment and operating costs

5 Governance and organisation

5.1 Te Tiriti o Waitangi obligations

Selwyn Water's approach to iwi and Māori partnerships is set out in Chapter 3 of the Water Services Strategy, and is reflected in the asset management approach described in this SAMP.

As part of its strategic objective, we recognise our obligation under the Local Government Act 2002 to establish, maintain and provide opportunity for Māori to participate in decision making and to fostering the development of Māori capacity to contribute to decision making.

The territorial area governed by Selwyn District Council sits within the takiwā (territory) of Ngāi Te Ruahikihiki and Ngāi Tūāhuriri. The two hapū (subtribes) jointly hold mana whenua status in the takiwā.

Two legal entities act on behalf of the hapū, Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga, respectively. In late 2022, Council signed a formal relationship agreement with Te Taumutu Rūnanga. Relationship discussions have commenced with Te Ngāi Tūāhuriri Rūnanga.

In accordance with the Statement of Expectations, Selwyn Water will work with mana whenua (and key stakeholders) with the following objective and outcomes:

1. Build strong and constructive relationships with mana whenua and all key stakeholders.

   Develop relationships with:

   (a) The Selwyn District community, through:

      (i) A transparent approach to strategic planning;

      (ii) Regular public sharing of information outlining intended activities on Selwyn Water's website;

      (iii) Open, collaborative consultation that focusses on ensuring that directly affected or interested communities have opportunities to engage directly with Selwyn Water (where required); and

      (iv) Providing options for consumers to directly interface with Selwyn Water, including for any customer complaints or assets failures; and

      (v) Considering the potential benefit of establishing a community liaison group, and reporting to SDC in the first half yearly report as to whether this is workable;

   (b) Ngai Tahu, and local Rūnanga, to ensure that:

      (i) iwi values and issues are reflected in Selwyn Water's plans and initiatives in accordance with SDC's bicultural strategy-Te Rautaki Tikaka Rua; and

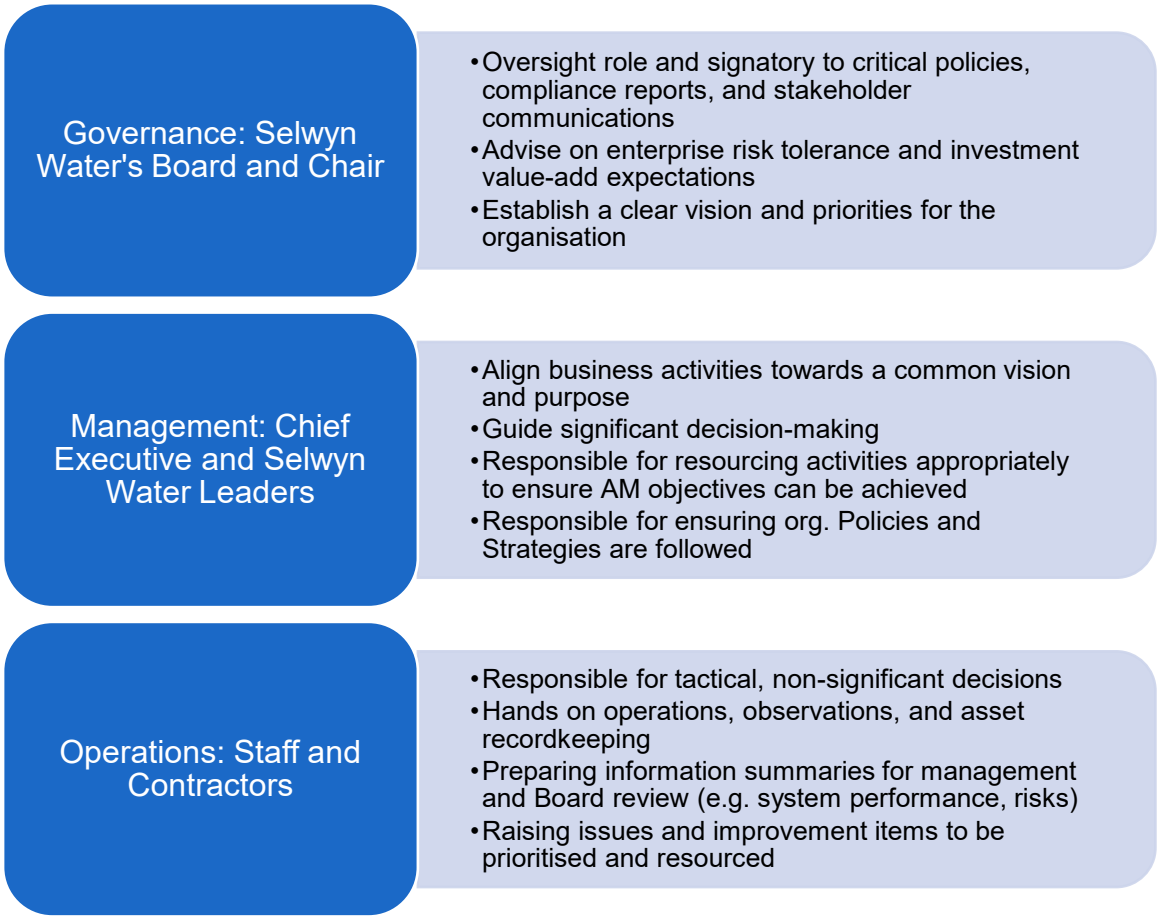
   Selwyn Water partners with iwi where possible and otherwise supports and continues to build on the existing strong relationship between iwi with SDC

These relationships and obligations inform Selwyn Water's asset management decision-making, including how environmental outcomes, cultural values, and community expectations are considered in planning, investment, and operational decisions.

5.2 Selwyn Water governance structure

The asset management role of each governance level in Selwyn Water is outlined in **Error! Reference source not found.**.

Figure 3: Selwyn Water organisational structure



5.3 Selwyn Water strategic objectives

Our strategic objectives are provided in the WSS and repeated here.

They are to:

1. **Protect public health and the environment**
   by delivering safe, reliable, sustainable, and resilient drinking water and wastewater services that meet all regulatory and environmental requirements.

2. **Deliver services in a financially sustainable manner**
   ensuring that costs are managed prudently, resources are used efficiently, and the costs of water services are shared fairly over time between current and future users.

3. **Continuously improve service performance and efficiency**
   as we transition from Council-delivered services to a specialist water services provider, building capability, data quality, and systems that support long-term service excellence.

4. **Build trust and accountability**
   with our communities, mana whenua, regulators, and shareholder through transparent decision-making, strong governance, and clear communication about performance, costs, and trade-offs.

5. **Be a capable and responsible employer**
   with the leadership, culture, and workforce required to deliver safe, reliable, and sustainable water services over the long term.

These objectives are interrelated and must be pursued together. Decisions that advance one objective (for example, resilience or compliance) may create pressures on others (such as affordability), requiring informed judgement and transparent trade-offs.

5.4 Skills and resourcing

The asset management objectives provide the desired outcomes of Selwyn Water's asset management activities. Meeting these objectives will require modern and sophisticated systems. These will require specialist personnel and technical resources. It will also require that we complement our technical approach with one focussed on understanding and integrating our partners' objectives.

Within the asset management practice area, skills such as risk management, asset condition & performance assessment, data analysis, and maintenance optimisation will be essential.

Selwyn Water operates in a competitive environment for specialist water sector skills and capability. To address this, Selwyn Water is developing a structured approach to workforce capability and resourcing, aligned with its strategic objectives. This includes building internal capability for core asset management functions, accessing specialist expertise where required, and leveraging partnerships and secondments during the establishment phase. Over time, Selwyn Water will continue to develop a high-performing, adaptable workforce with the skills and systems required to support effective asset management, decision-making, and service delivery.

This approach reflects the broader workforce strategy outlined in Chapter 6 of the Water Services Strategy.

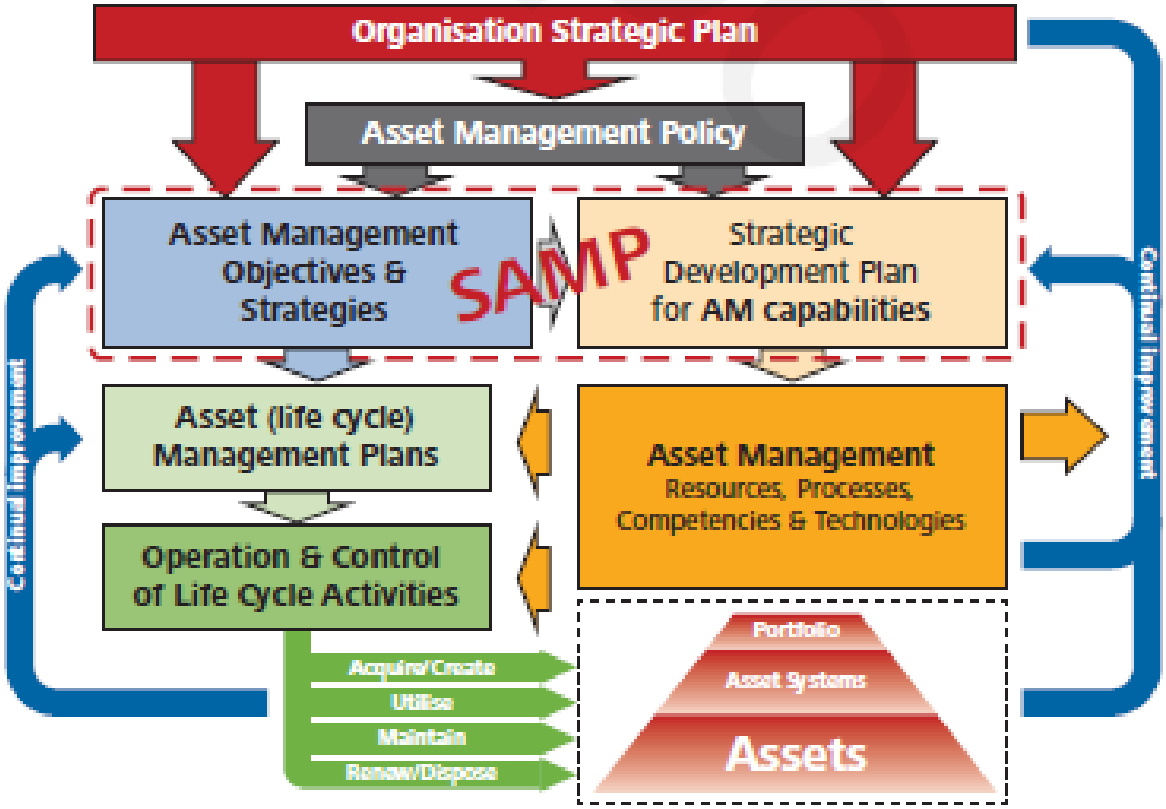
6 The Asset Management framework

6.1 The asset management system

According to the IIMM, the Asset Management System "is the set of people, processes, tools and other resources involved in the delivery of Asset Management" and is represented in **Figure *4***.

Notably, the scope of the AM System extends beyond the day-to-day activity of updating asset plans and data to encompass all asset life cycle activities. This broader set of activities (in green) should align with the asset management objectives and strategies, and the optimisation of these life cycle activities should be enabled by asset management technologies and processes.

Figure 4: Primary elements of an asset management system (IAM, UK)

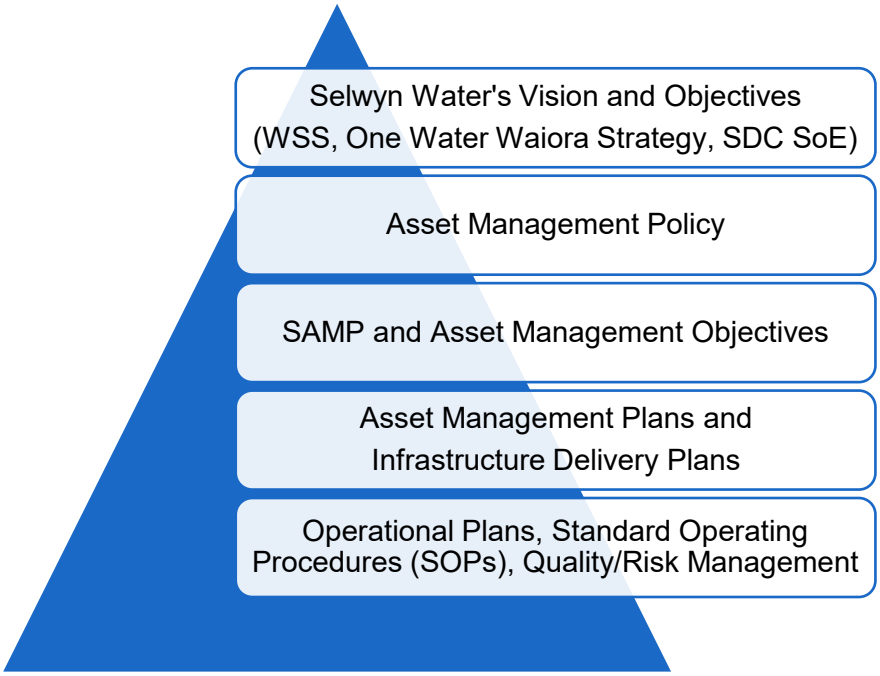


Represented within the "continual improvement" loop (blue arrows) are customer/stakeholder inputs and technical innovation, in addition to the standard "plan, do, check, act" internal review process.

6.2 Alignment with strategies, standards, and policies

The relationship between strategies, standards and policies is outlined in **Figure *5***.

Figure 5: Relationship between strategy, policies and processes



While much of this content has been transferred from SDC, Selwyn Water will review and update as part of ongoing improvement.

These governance and asset management documents are supplemented by industry standards, legislation, and regulatory requirements.

6.2.1 Asset management policy

A draft Asset Management Policy is currently being developed. Once adopted, it will affirm Selwyn Water’s target level of asset management maturity and support aligned resourcing and capability development.

6.3 Portfolio asset management objectives

Selwyn Water's asset management objectives are derived from the high-level organisational objectives in the Water Services Strategy (see 5.3 above). These Portfolio AM Objectives set expectations for asset management activities across the organisation and guide how drinking water and wastewater assets are managed from cradle to grave.

WSS Organisational Objective (strategic desired outcome)	Portfolio Asset Management Objectives (what must be achieved through our effort)
1. Protect public health and the environment	1a. Define system-wide performance measures across safety, reliability, sustainability, and resilience, and refine these measures over time
	1b. Evaluate the safety, reliability, sustainability, and resilience of drinking water and wastewater systems against defined performance measures
	1c. Identify and implement improvements as needed to meet these performance measures (safety, reliability, sustainability, and resilience)
	1d. Manage assets to meet all regulatory requirements, ensuring compliance with minimum standards
	1e. Recognise and integrate the goals and objectives of the Waiora One Water Strategy
2. Deliver services in a financially sustainable manner	2a. Deliver cost-effective services which represent good value
	2b. Ensure lifecycle costs are fully recovered, and that costs are allocated fairly (user pays, intergenerational equity)
	2c. Design efficient assets and systems that will be financially sustainable to operate, maintain, and renew over the long term
	2d. Enable sustainable and planned growth in 2W networks, while maintaining a high level of network performance and compliance
	2e. Ensure growth pays for growth by aligning current and projected growth and development activity with capital investment and operational requirements, via DCs and other cost recovery mechanisms.
3. Continuously improve service performance and efficiency	3a. Drive continuous improvement across each activity in the asset life cycle, as well as in enabling functions such as data management and analysis. Identify opportunities to improve efficiency and quality.
4. Build trust and accountability	4a. Maintain a register of performance measures and Level of Service standards, engaging with customers and stakeholders to align these LoS to their expectations
	4b. Enhance service reliability and quality when LoS standards are not met (based on customer/stakeholder feedback or internal analysis)
	4c. Communicate clearly how asset network issues are prioritised (based on risk or severity), with timely updates

WSS Organisational Objective (strategic desired outcome)	Portfolio Asset Management Objectives (what must be achieved through our effort)
	4d. Enhance the transparency of asset data, network performance & capacity, asset management decisions, and asset management costs (within the enterprise and for our stakeholders)
5. Be a capable and responsible employer	5a. Leadership instils Selwyn Water's values in the organisation's culture and priorities, especially with regards to significant decisions
	5b. Evaluate Selwyn Water's capability to deliver its objectives in terms of human resource (bandwidth and skills), technology, information, and process maturity
	5c. Minimise the impacts of services provision on cultural and heritage values
	5d. Minimise the impacts of services provision on the environment, including climate impacts

In future SAMPs, we will articulate how these objectives will be measured over time. We must also define success criteria for each of these measures.

This list of objectives is also expected to evolve and expand as Selwyn Water grows into its new responsibilities.

6.4 Strategic objectives for asset management capability

Selwyn Water is establishing and progressively improving its asset management capability to support effective and sustainable service delivery.

The key objectives for asset management capability are:

- Ensure the asset management system is resourced appropriately to enable the delivery of asset management objectives.
- Provide timely and reliable asset information and analysis to support decision-making.
- Enable lifecycle cost analysis to support financial sustainability and investment planning.
- Support consistent and transparent prioritisation of capital and operational initiatives
- Integrate asset condition, performance, and criticality data into maintenance and renewal decisions.
- Support risk-based decision-making, including resilience to natural hazards and climate change.
- Support clear public communication about system performance, costs, and trade-offs via AM planning documents, ID disclosures, engagement campaigns, and other stakeholder communications.
- Assess assets' capacity against demand projections and identify the capital investments or other initiatives required to manage growth. Enable and support a programme of demand management for Selwyn Water's water and wastewater systems

- Assess asset risks (e.g. those identified in drinking water safety plans, source water risk management plans, and wastewater network risk management plans) against Selwyn Water's risk tolerance. Assess networks' level of risk and resilience relating to natural hazards and climate change. Identify and prioritise risk mitigation measures accordingly, in alignment with Selwyn Water's risk management framework
- Assess the extent to which forecast investment is sufficient to meet SWL objectives and stakeholder expectations in the long term (financial sustainability)
- Identify and implement those asset management improvements required to achieve Selwyn Water's objectives.

6.4.1 Asset management maturity

Understanding current and target asset management maturity is the essential first step to calibrate Selwyn Water's investment in asset management systems, processes, and capability. Selwyn Water's commitment to attaining these targets will be affirmed in the Asset Management Policy.

Current maturity assessment

A rapid maturity assessment was completed in March 2026, and this determined the ratings and gaps shown below. This assessment, undertaken while Selwyn Water is in a transition phase, provides indications of areas which we will focus on in the transformation phase.

Figure 6: Drinking water asset management maturity assessment (2026)

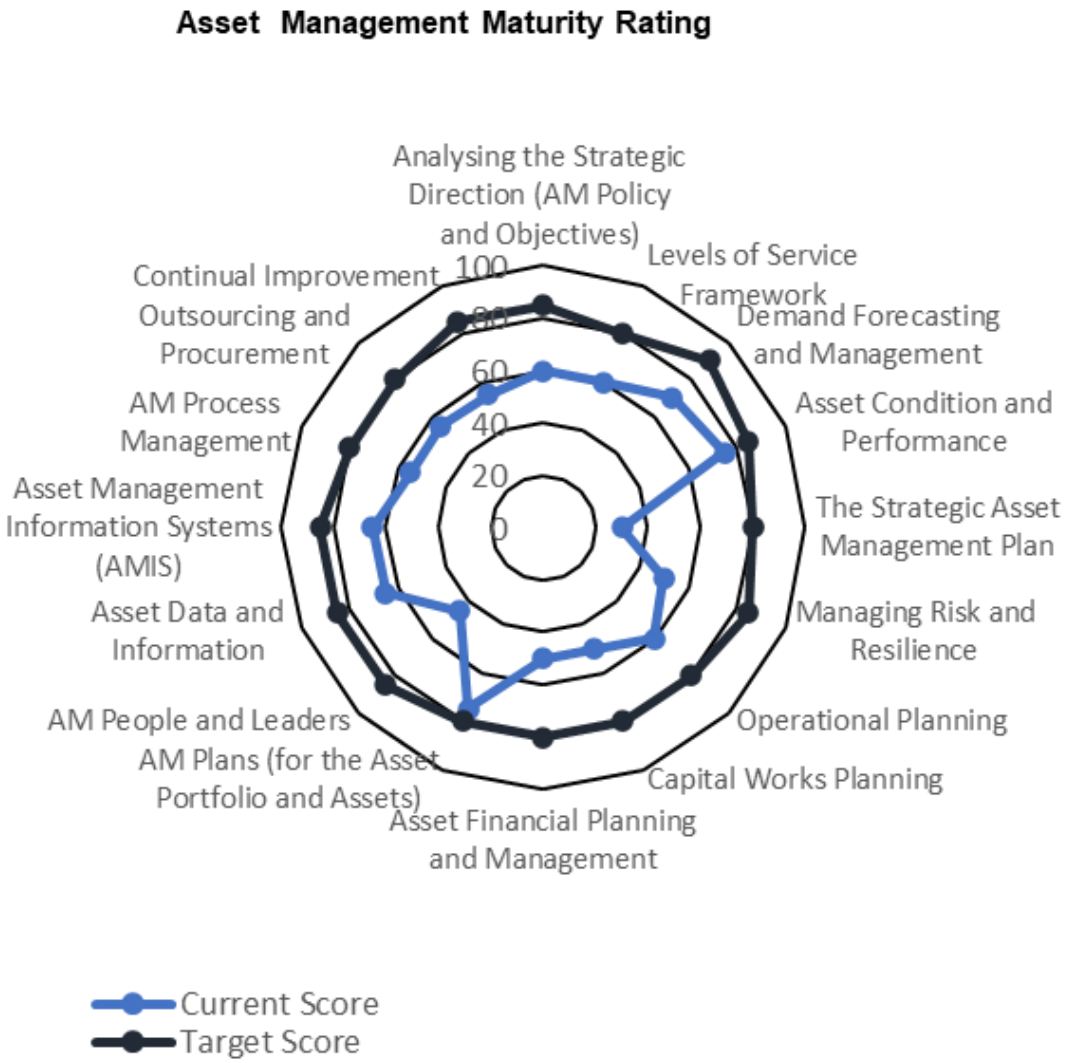
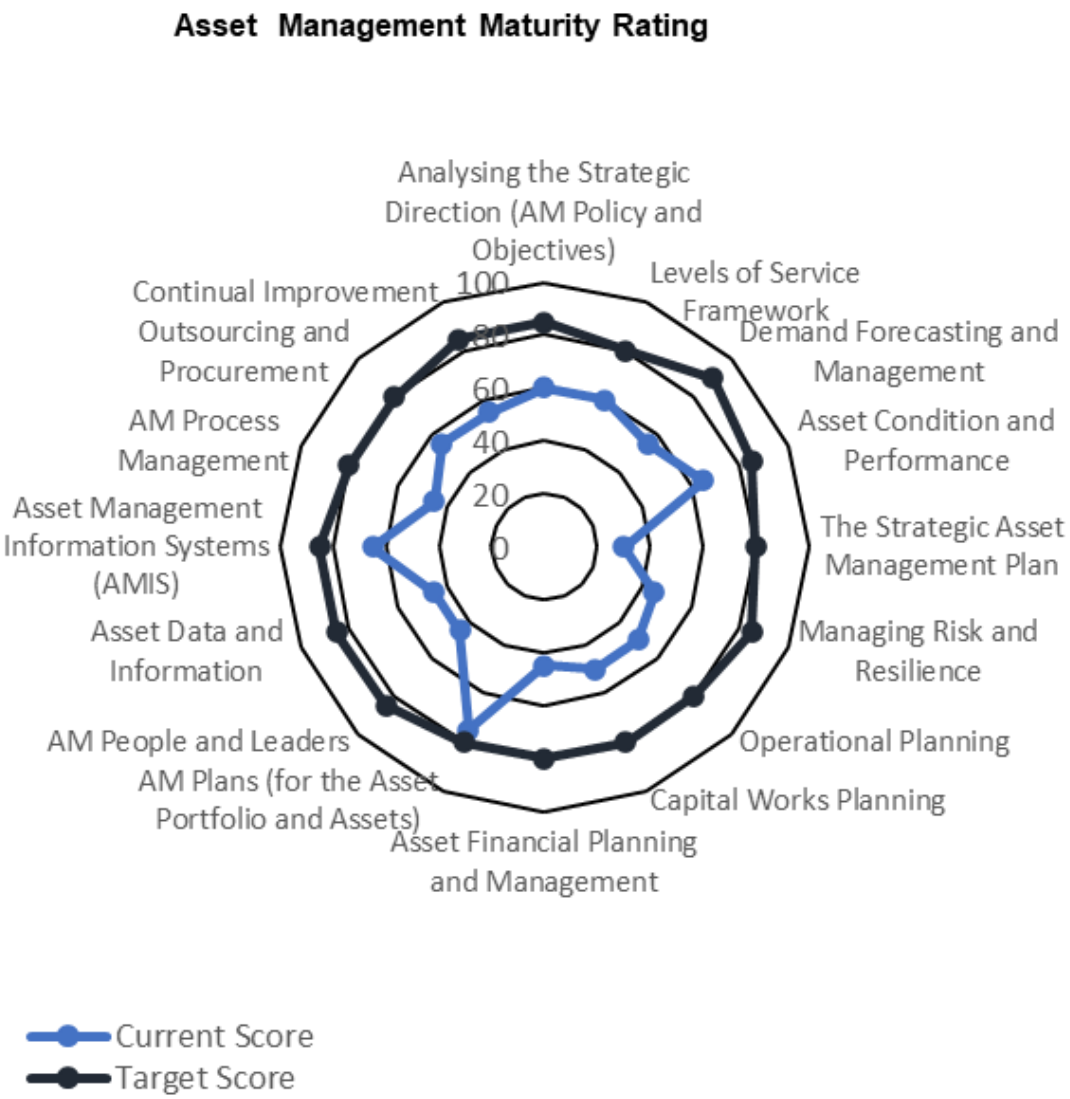


Figure 7: Wastewater Asset Management Maturity Assessment (2026)

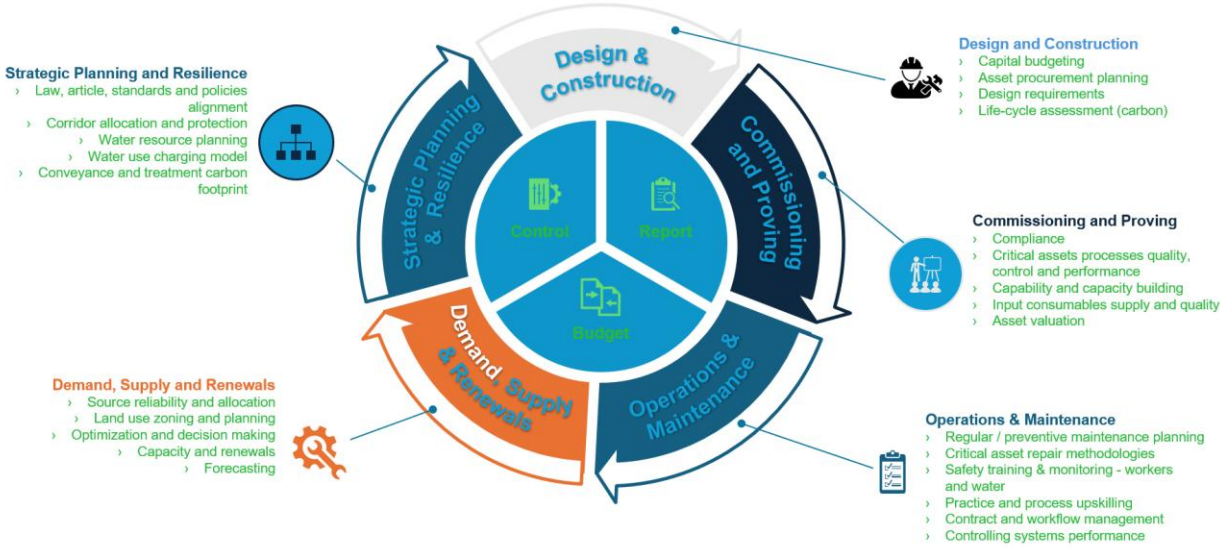


7 Lifecycle asset management

Lifecycle asset management overview

This section outlines the key lifecycle stages and Selwyn Water's approach to managing assets at each stage. Full descriptions of lifecycle asset management processes, including how needs are identified, prioritised, and addressed through planning, investment, and operational activities will be provided in the next SAMP update.

Figure 8: Water's asset management lifecycle overview



7.1 Identifying asset-related needs

Selwyn Water identifies asset-related needs through a structured and ongoing assessment of service demand, asset performance, regulatory requirements, and risk.

Asset-related needs arise from a combination of factors, including:

- Population growth and changing demand for services
- The need to maintain and improve levels of service
- Asset condition and performance issues
- Regulatory and compliance requirements
- Risk and resilience considerations, including natural hazards and climate change
- Te Tiriti o Waitangi obligations and stakeholder expectations

These drivers are assessed using available data, network modelling, condition and criticality assessments, and operational experience. Together, they inform the identification and prioritisation of investment and operational responses across the asset lifecycle.

7.1.1 Growth and development

Growth is a defining strategic backbone for Selwyn Water. It shapes the scale, timing, and location of water and wastewater investment over the next decade along with the resources we need to meet the objectives. Selwyn District is experiencing sustained population and

development growth. This pattern of growth places pressure on existing assets, reduces available headroom, and accelerates the timing of investment that might otherwise have occurred later.

Selwyn Water is developing policies and strategies to manage the high level of infrastructure investment required to align with growth demands in Selwyn. Population forecasts were updated in 2025 in coordination with SDC's Strategy and Policy team. Further modelling and planning is required to fully account for long-term asset investment needs.

7.1.2 Levels of service and asset performance

Selwyn Water's current performance measures are discussed in detail in the WSS.

As a newly established water services provider, many of Selwyn Water's performance measures and service standards are inherited from Selwyn District Council's Long-Term Plan (LTP 2024–2034) and the adopted Water Services Delivery Plan (WSDP, June 2025). These measures provide continuity for customers and establish a clear baseline as responsibility for water services transitions to Selwyn Water.

Performance measures are recorded and reported on annually. In addition to these formally adopted measures, asset performance is also monitored through operational reporting, network analysis, and customer feedback.

7.1.3 Asset condition

Asset condition information is derived from condition and criticality models established by Selwyn District Council and updated as part of the transition to Selwyn Water. A condition grading model has been in place since 2014 and is updated annually using a combination of:

- CCTV inspections of network assets.
- A condition model incorporating asset age, material, diameter, usage and assumed useful lives.
- Condition assessments provided by maintenance contractors.

These inputs provide a high-level but comprehensive view of network condition across the district, suitable for strategic planning and prioritisation.

7.1.4 Regulatory change and Treaty obligations

Regulatory and compliance requirements are a significant and non-discretionary driver of water and wastewater investment and operating costs.

Regulatory requirements also influence the timing and specification of investment. Assets may need to be upgraded earlier, built to higher standards, or operated with greater redundancy, monitoring, and reporting capability than under historical arrangements.

Over time, expectations for water services are likely to continue to evolve, including potential future requirements relating to water quality (such as emerging contaminants, nutrients or cyanobacteria), environmental performance, and service reliability. While not all future requirements are known or quantified, they create uncertainty that must be managed through adaptable planning rather than fixed assumptions.

7.1.5 Risk and resilience

Refer to risk and resilience section below (8.0)

7.1.6 Asset criticality

In addition to asset performance/condition, Selwyn Water applies an asset criticality framework to identify assets where failure would have the greatest consequences. Critical assets are those whose failure would have significant public health, service continuity, environmental, cultural, or economic impacts.

The most recent criticality assessment was undertaken in 2025. The assessment considered the scale and duration of disruption, the number of customers affected, and the sensitivity of receiving environments and communities. Criticality scores are recorded within the asset management system and spatially referenced through GIS.

7.2 Prioritisation criteria

A detailed account of project prioritisation practices will be provided in the 2027 IDP once these are defined and affirmed by Selwyn Water. Investment criteria and their qualitative ranking will also be developed at the same time – linked directly to the Water Services Strategy objectives.

Capital investments and other initiatives compete for limited resources, which creates a need to prioritise them using objective criteria.

Selwyn Water will apply a structured prioritisation framework to support consistent and transparent investment decisions.

This framework is used to assess and rank capital investments and other initiatives where resources are constrained, and ensures alignment with strategic objectives, levels of service, and risk management priorities.

Investment Criteria

SAMP Criterion	**Description**	**Alignment with WSS Objectives**				
		1	**2**	**3**	**4**	**5**
Compliance/ Level of Service	Driven by strategic objectives – quality, customer experience, environment					
Risk and Resilience	Considers the likely and consequential impacts if not prioritised					
Growth	Strategic alignment with demand projections					
Opportunity and Efficiency	Value-add not incorporated above, additional cost/benefit considerations					

Projects may receive a higher or lower ranking within each criterion depending on the degree to which the criterion is relevant (e.g. relative risk rating).

Projects which represent dependencies or prerequisites for other high-priority items will be more highly prioritised.

7.3 Decision-making and managing trade-offs

While the prioritisation criteria provide a tool for initially comparing projects, decisions often require the exercise of professional judgement, particularly where competing objectives cannot all be met simultaneously.

Per the Water Services Strategy, these decisions are guided by the following decision hierarchy:

1. **Public health and statutory compliance**
2. **Maintaining safe and reliable core services**
3. **Affordability for current and future consumers**
4. **Supporting growth and development**

Some examples of trade-offs considered in asset management decision-making include:

- **Growth investment vs timing and utilisation**
  Infrastructure may be delivered ahead of demand to enable growth, or staged to align more closely with actual uptake, depending on risk, financing, and development certainty.
- **Renewals vs optimisation of existing assets**
  Decisions consider whether assets should be renewed, refurbished, or continue to operate with increased maintenance, based on condition, performance, and risk.
- **Service level improvements vs cost**
  Enhancements to reliability, resilience, or performance are assessed against their cost and the value delivered to customers and communities.

Decisions are informed by available data, asset condition and performance information, lifecycle cost analysis, and stakeholder input. Where information is uncertain or evolving, a prudent and adaptive approach is taken.

7.4 Stakeholder engagement

Stakeholder Engagement is discussed in depth in the WSS.

Engagement with customers and other stakeholders is critical to inform levels of service and calibrate appropriate performance objectives for the asset network, which in turn inform Selwyn Water's investments in capital works and operational improvements.

To inform asset management, key consumer and stakeholder expectations include:

- Quality
- Reliability
- Affordability
- Transparency (performance, costs, decision-making)
- Sustainability (financial and environmental)

In the coming 12 months, we will be focused on engaging with customers and building additional customer-facing capabilities as our new enterprise takes over billing for water and wastewater services from SDC. From an asset management perspective, this presents a timely opportunity to engage with our customers and other stakeholders to better understand current priorities along with trade-offs between service quality and cost. This essential feedback will then inform our asset management priorities and decision-making.

We will need to make significant decisions on a range of infrastructure issues, as highlighted in the Water Services Strategy. Stakeholder engagement will be essential to enable informed and optimised decision-making.

7.5 Asset portfolio lifecycle management

Selwyn Water manages its asset portfolio across the full asset lifecycle, including planning, acquisition, operation, maintenance, renewal, and disposal.

Lifecycle management is guided by the following principles:

- Assets are managed to meet defined levels of service and regulatory requirements
- Lifecycle decisions consider whole-of-life costs, including capital and operating expenditure
- Condition, performance, and criticality data are used to inform maintenance and renewal decisions
- Renewal and upgrade decisions consider opportunities to improve resilience, capacity, service performance, sustainability, and efficiency
- Investment is prioritised based on risk, LOS performance, and alignment with strategic objectives

Selwyn Water is continuing to develop and refine its lifecycle management practices, by improving data quality, modelling, and decision-support tools. Further detail will be provided in future updates to this SAMP and in supporting Asset Management Plans.

7.6 Selwyn Water metering strategy

Selwyn Water is currently developing its metering strategy. This will address the role of metering in demand management, billing, and network planning, including consideration of smart metering technologies. Further detail will be provided in future updates to this SAMP.

Together, the processes described in this section provide a consistent and transparent basis for identifying needs, prioritising investment, and making asset management decisions that align with Selwyn Water’s strategic objectives and financial constraints.

8 Risk and resilience

This section covers risk, resilience and climate change and natural hazard responses

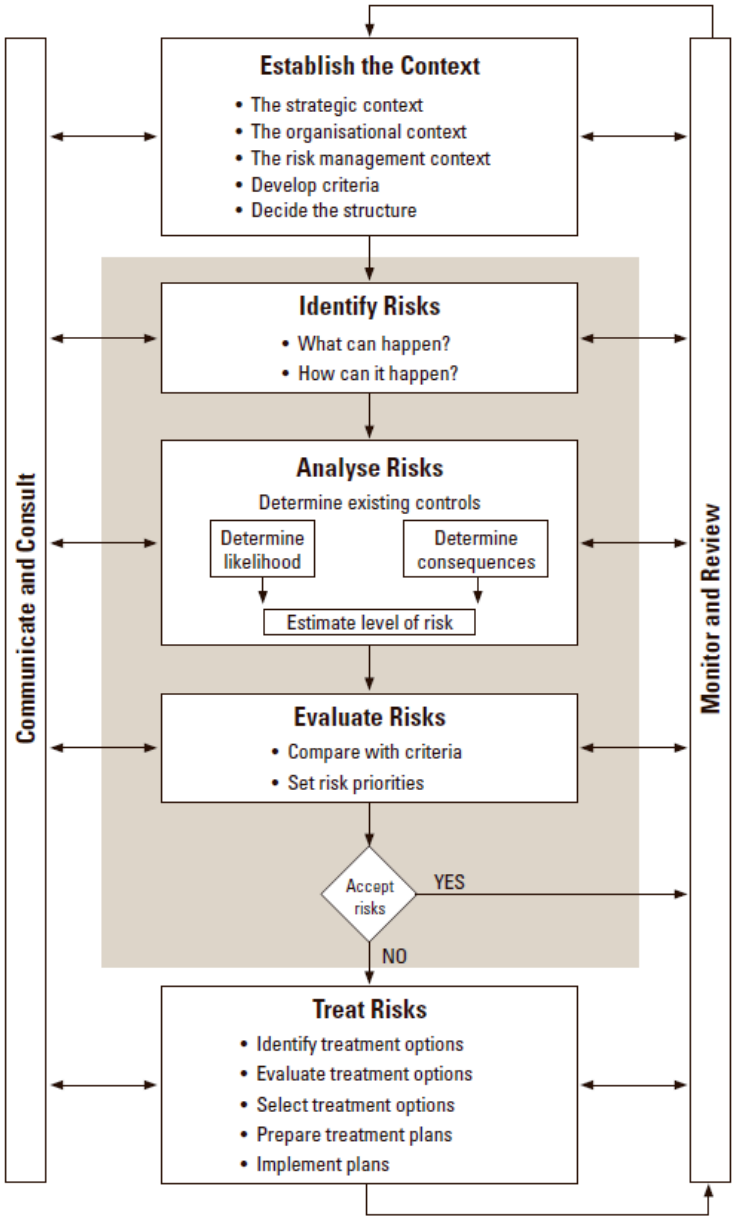
8.1 The risk management framework

Selwyn Water will align its risk management practices with ISO 31000 (2018), providing a consistent and structured approach to identifying, assessing, and managing risks across its asset portfolio.

8.1.1 The risk framework

An example risk framework is described in **Figure *9***.

Figure 9: Risk management process summary



Source: AS/NZS 4360:1999

8.1.2 Risk appetite

Selwyn Water is currently developing its formal risk appetite and tolerance statements. In the interim, a conservative approach is adopted, with priority given to risks that impact public health, regulatory compliance, and service continuity.

Risk appetite will be formalised and approved as part of Selwyn Water's risk management framework in future updates.

8.1.3 Risk practices

As shown in **Figure *10***, Selwyn Water applies risk management practices at multiple levels:

- **Corporate risks** are managed through the organisation's broader risk management framework
- **Service-level risks** are identified through Drinking Water Safety Plans and Wastewater Risk Management Plans

Identified risks are assessed and prioritised, with high-priority mitigation actions incorporated into operational programmes and the capital delivery pipeline.

Figure 10: Our Waters Quality Management Framework

We have the following risk practices:

Corporate Risk

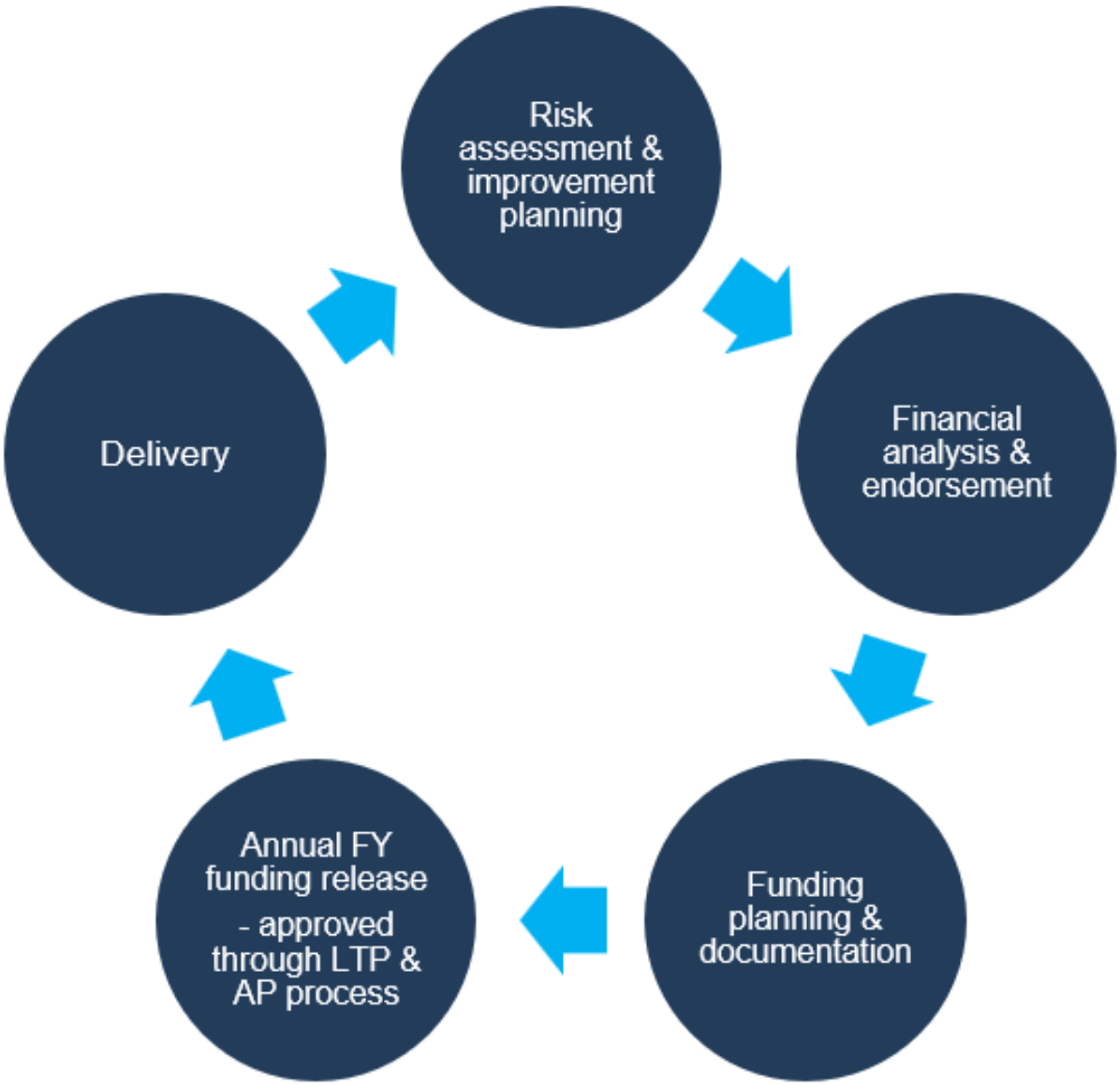
Corporate risks are managed through Selwyn Water's organisational risk management framework, which aligns with the asset-level risk practices described in this section.

Service Risks

Service risks are identified through the Drinking Water Safety Plans and Wastewater Risk Management Plans (draft)

Once risks have been identified, they are prioritised for risk mitigation and high-priority risk mitigation projects are incorporated into the capital delivery pipeline – see **Figure 11**.

Figure 11: Risk Improvement Project Planning Cycle



8.1.4 Risk management strategies

Risk management strategies which address potential challenges in achieving the strategic objectives are listed in **Table *1***. Robust business process will be essential for all strategies to be successful. The key risks identified across the asset lifecycle inform the prioritisation of investment and asset management decisions, as described in Section 7.

Table 1: Risk management strategies

Asset Lifecycle Stage	Key Risks	Risk Management Strategies
Planning and Investment	Inaccurate demand forecasting leading to under- or over-investment	Scenario modelling for demand, growth, and climate
	Misalignment between growth planning and infrastructure delivery	Integrated planning with land use and development strategies
	Inadequate source protection or inability to discharge wastes	Catchment risk assessments and source protection planning
	Regulatory non-compliance	Regulatory alignment reviews and early engagement with regulators
	Climate variability and long-term supply risk (e.g. drought)	Long-term planning incorporating climate and resilience considerations
Design and Delivery	Incorrect asset sizing or technology selection not meeting current or future needs	Capacity and water quality modelling; technology evaluation
	Design or construction defects affecting long-term performance	Design reviews, peer review, and QA/QC processes
	Inadequate resilience to natural hazards (earthquakes, floods, landslides)	Hazard-informed design standards and engineering assessments
	Cost overruns or delays due to design, construction, or unknown conditions	Lifecycle cost analysis and robust project planning and controls
Operations and Maintenance	Asset failure or service disruption due to condition, age, or inadequate maintenance	Preventive and predictive maintenance programmes
	Water contamination or treatment process failure	Risk management plans and continuous monitoring systems
	Failure of critical operational systems (e.g. SCADA, telemetry) including cyber threats	Cybersecurity measures, system redundancy, and monitoring
	Increased operating costs (e.g. energy, chemicals)	Operational optimisation and efficiency measures
Renewal and Upgrade	Delayed or insufficient renewals leading to increased failure risk	Condition assessments and risk-based renewal prioritisation

Asset Lifecycle Stage	Key Risks	Risk Management Strategies
	Inefficient upgrade decisions increasing long-term costs	Lifecycle cost analysis and optimisation of renewal scope
	Service disruption during renewal or upgrade activities	Staging, redundancy planning, and temporary supply measures
	Funding constraints affecting timing and delivery of investment	Long-term financial planning and alignment with funding strategies

8.1.5 Resilience – natural hazards and climate change

Selwyn District is exposed to a range of natural hazards and climate-related risks that have the potential to affect the performance and resilience of water services infrastructure.

The key hazards relevant to Selwyn Water's assets include:

- **Climate-related hazards**: increased frequency and severity of flooding, drought, and extreme rainfall events
- **Natural hazards**: earthquakes, landslides, and associated ground instability

Climate Change

Climate change is expected to increase both the frequency and severity of extreme weather events across the district. Key risks include:

- **Flooding and heavy rainfall**: increased risk of inundation, network surcharge, and damage to infrastructure
- **Drought**: potential long-term pressure on water supply sources and system capacity
- **Groundwater changes**: rising groundwater levels in low-lying areas, affecting asset condition and performance
- **Temperature increases**: potential impacts on water demand, treatment processes, and asset performance
- **Fire risk**: increased fire risk in vegetated and alpine areas, with potential impacts on infrastructure, water supply catchments, and service continuity

Different parts of the district are exposed to different risks:

- **Plains and lowland areas**, including Te Waihora / Lake Ellesmere, are susceptible to flooding, high groundwater levels, and drought conditions
- **Hill and alpine areas** are exposed to landslides and high-intensity rainfall events and increasing fire risks
- **Coastal areas** may experience longer-term risks from sea level rise, including potential saline intrusion into groundwater

While some of these risks are long-term in nature, they are considered in current planning to ensure that infrastructure is resilient over its expected life.

Asset Management Implications

These hazards have implications for how assets are planned, designed, and managed, including:

- Incorporating resilience into design standards (e.g. seismic, flood, and geotechnical considerations)
- Assessing asset location and exposure to hazards
- Ensuring appropriate levels of redundancy and emergency response capability
- Considering long-term changes in demand and supply conditions
- Monitoring emerging risks such as changes to groundwater aquifers and surface water quality changes

Selwyn Water will continue to develop its assessment of climate and hazard risks over time.

8.2 Risk and resilience improvements:

Selwyn District has experienced significant earthquake events – with the Greendale 2010 and City 2012 events resulting in significant infrastructure damage. For various reasons, the impact on Selwyn was minor in comparison to other locations, however building resilient infrastructure remains an essential part of design practices. Water service infrastructure is built to infrastructure level (IL) 4 standards e.g., water reservoirs, wastewater treatment structures, though some older structures will need to be strengthened to meet IL requirements.

Selwyn Water is progressively strengthening the resilience of its asset portfolio through design standards, targeted upgrades, and improved risk assessment processes. These improvements are prioritised based on risk, service impact, and alignment with long-term asset management objectives.

9 Asset management improvement schedule

Selwyn Water is in an establishment phase and has identified a number of priority improvements to strengthen its asset management capability. These improvements are informed by the Asset Management Maturity Assessment and regulatory requirements.

Item	Issue	Action	Priority	Owner, target completion date
1	AM Objectives and Improvements need to be affirmed and assigned Owners	Board/Exec. team to affirm objectives, improvement priorities, and assign responsibility for delivery	High	Board/Executive. team
2	AMMA current and target levels are based on a quick self-assessment	Update with a professional audit	Medium	TBC
3	Asset Management Policy is draft, not in effect	Approval and adoption by the Board	High	TBC
4	Demand monitoring and management needs to be maximised	Develop and proceed with action plans for water loss management, water efficiency, and wastewater inflow/infiltration reduction	High	TBC
5	Information Management and Data Management Plans/Strategies are absent, critical information can be misplaced or lost entirely	Engage a specialist to guide the development of Selwyn Water info/data mgt. guidance based on best practices	High	TBC
6	Asset condition assessment is ad-hoc, not integrated with other aspects of asset life-cycle management	Establish a formal approach to asset condition assessment, aligned with criticality and risk/resilience.	Medium	TBC

Item	Issue	Action	Priority	Owner, target completion date
7	Asset Risk & Resilience are not quantified, risks raised in operational reviews are not closely integrated with asset planning	Confirm a preferred methodology (e.g. J100) and perform a risk and resilience assessment.	Medium	TBC
8	Future capital works plans are distributed across several documents, spreadsheets; difficult to optimise programme	Integrate master planning and other project ideation with Forward Works Viewer and/or another spatial database	Medium	TBC
9	Legacy AMP contents are not entirely aligned with new WSS, SAMP	Close review of AMP contents against new WSS and SAMP for consistency, minimise duplication	Medium	TBC
10	Organisation-wide awareness of asset management is limited	Confirm target level, conduct internal training or enrol staff in 3rd party professional development	Medium	TBC

9.1 Improvement plan – implementation roadmap

Further detail on implementation will be developed as Selwyn Water's asset management capability matures.

9.1.1 Action plan for asset management systems development

Selwyn Water will develop a structured implementation plan aligned with the priorities identified in Section 9.0.

This initial plan will focus on strengthening core asset management capabilities, including data quality, systems, lifecycle planning, and risk-based decision-making.

9.1.2 Key deliverables and milestones

Key deliverables and milestones will be defined for each improvement initiative, including interim checkpoints to monitor progress.

These milestones will support regular reporting to management and the Board and will be aligned with regulatory reporting cycles where appropriate.

9.1.3 Responsibilities and reporting

Responsibility for delivery of improvement initiatives will be assigned to appropriate functional leads, noting that many asset management activities must necessarily engage multiple functional teams.

Oversight will be provided through Selwyn Water's governance and reporting framework. Progress will be monitored through regular internal reporting and periodic review by senior management and the Board.