

Asset Management Approach

August 2022



Terminology

- Asset Management System

The combination of the policies and processes, the systems and the people that implement it.

- Strategic Asset Management Plan

Describes how we do asset management and how we are going to improve.

- Asset Management Plan

A plan developed for the management of infrastructure assets over their life cycle to provide a specific level of service.

- Asset Management Information Systems

The software and tools used to manage asset information.

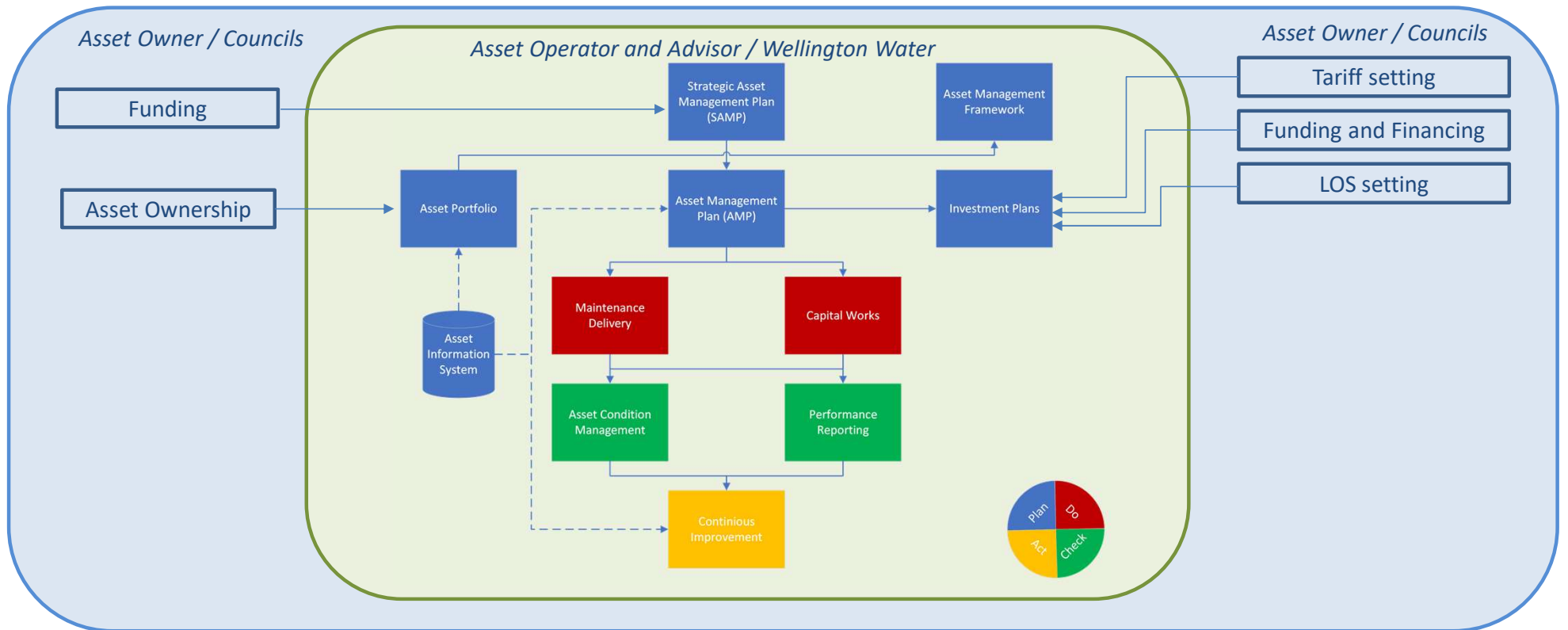
- Investment Plans

Long term expenditure plans developed to ensure that opex and capex spending plans are sufficient and available.

Asset Management – Accountabilities

Councils		Wellington Water
<ul style="list-style-type: none">• Tariff Setting• Funding and Financing• Levels of service (LoS) setting• Investment Prioritisations• Asset Ownership		<p>Strategic Asset Management Plan</p> <ul style="list-style-type: none">• 30 year planning• Strategic priorities• Risk assessment• Options <p>Asset Management Plan</p> <ul style="list-style-type: none">• Mix of upgrade, growth and renewal• Planned• Investigate• Condition assess

Overview



What WWL inherited in 2014

Services

- Disparate systems, processes and asset practices
- Networks lacking resilience
- Underinvestment (to various levels) in asset renewals
- Terminating DBO contracts for wastewater treatment
- Wastewater network vulnerable to overflows
- Infrastructure requirements for growth were reactive to councils plans
- Looming need for additional water source with increasing water losses

Systems

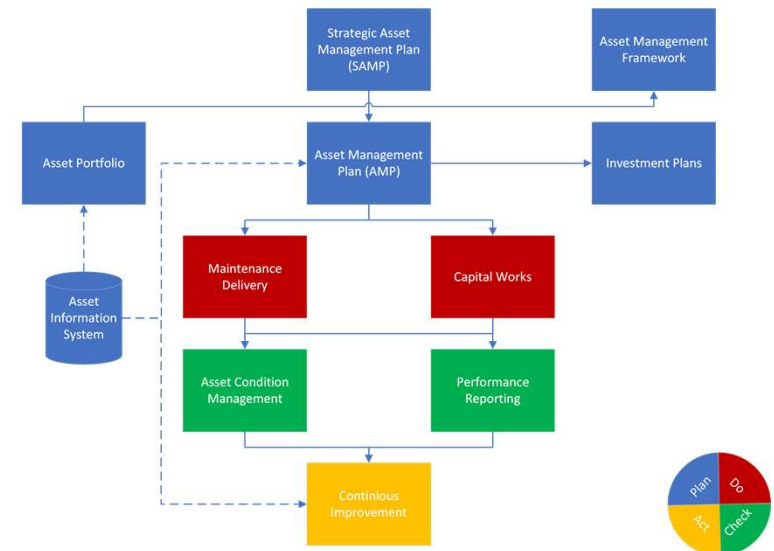
- All customer enquiries still directed to councils
- Multiple formalized data systems
- Even greater number of informal data systems
- No metadata standards
- Variable design standards
- Variable approaches to points of supply and public ownership of assets
- Lowest cost procurement approach
- Disconnected water safety plans with variable approaches
- Poor as built data and handover information for completed works

The Approach

- Resisted temptation to “patch repair” the inconsistencies
- Decided to approach asset management as if creating a new regional organisation
- Acknowledgement that we would be flying the plane as we built it

We needed to start at the start:

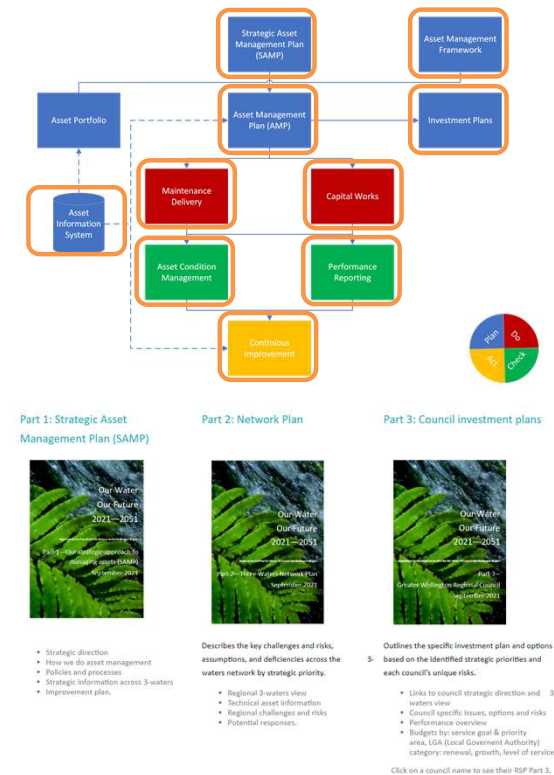
- Three waters strategy
- Common performance goals
- To think one water - not three
- Asset management system to improve workflow, processes and integrated planning – ISO55001 ⁽¹⁾
- Initial 2017 baseline assessment against IAM ⁽²⁾ standards confirmed our current state and then guided work



1. ISO 55001 – International Standard for Asset Management
2. IAM – Institute for Asset Management

Activities Completed

- Strategic Asset Management Plan (SAMP) and three waters AMPs
- Developed investment planning processes
- Adopted a three waters asset criticality framework
- Implemented a nationally leading condition assessment programme (VHCA)
- Developed intervention guides for stormwater, wastewater and water supply pipe assets to enable maintenance planning, ongoing condition assessment planning, refurbishment and renewals planning



Independent Assessment



Our progress has been independently reviewed by Deloitte (in 2021) and Covaris (2022) and concluded

- We have done well to bring together the disparate approaches of the councils into a consistent and strategic approach;
- The fundamentals are in place; and
- Achieving good practice will require several more years of effort (and resources).

The next steps

With two years until reform, actions now need to be appropriate to this context, we are focused on prudent and practical improvements that will:

- Further improve the quality of the asset information
- Proactively identify risk of asset failure and put in place interventions to manage the risk
- Develop an unconstrained investment plan for opex and capex on behalf of our councils for the Entity C 'Asset Management Plan'
- Support the continued uplift of the capital programme.

Asset Management – detailed activities

Understanding strategic risks

- Continuing to extend criticality assessments across portfolio
- Continuing to develop asset condition knowledge for very high and high criticality assets

Identifying and Intervening on Strategic Risks

- Closing out the VHCA work
- Reviewing maintenance plans for highly critical assets
- Risk and regulatory impacts
- Growth and strategic studies

Develop Supporting Processes

- Documenting procedures, accountabilities and competencies
- Asset creation and handover processes, including configuration management
- Operating Model and reporting
- Investment workflow

Asset Data Quality

- Ensuring consistent data quality and information
- Preparing data for handover to entity C

Entity C

- Collection and prioritisation within investment portfolios of all investment needs for 10 year AMP (with 30 year vision)

Asset Management Information System

Asset Management Information System

Wellington Water’s asset management information system is **not just one system**, but instead a **collection** of systems that perform specific functions throughout the asset management lifecycle. Each is connected to the Data Warehouse, allowing for consolidated reporting and analysis to take place.

Build

- Project Server holds all the project management information and documentation for executing the capital programme.
- WCC’s OneCouncil holds all the CAPEX and OPEX expenditure information related to building, maintaining, and operating our assets.

Master Data

- Effectively the “asset registers”
- InfoAsset masters all the underground asset information (network / linear).
- Maximo masters all the water treatment plant, pump station and reservoir asset data, and holds a copy of the InfoAsset data to enable maintenance activities to take place across the asset base.
- VAMS is the Veolia Asset Management System which holds the asset master data, and maintenance and operations records for the waste water treatment plants. It is not currently integrated with Wellington Water’s platform.

Reporting / Usage

- Data Warehouse connects all our disparate systems together to enable reporting and analysis to take place.
- Woogle, ArcGIS and Tableau enable asset management information to be accessed by staff, councils and consultants.

