



Pacific Region  
Infrastructure Facility

# Community of Practice Webinar 17:

## Asset Management Improvement Planning Guide - Launch

In partnership with



**PACIFIC WATER AND  
WASTEWATER ASSOCIATION**



# Overview of asset management and why it's important

# What is Asset Management?

Meet a required **level of service**, in the most **cost-effective** manner, through the management of assets for **present and future customers**



# What are levels of service?

Describe the outcomes that customers can expect from the service. Justify the funding necessary to deliver service.

Service parameters

**Quality**, Quantity, Accessibility, Reliability, Affordability, Efficiency...

Objective

- Provide safe drinking water

Performance measure

- % of water quality tests that meet drinking water standards

Target

- 100%





# Why is Asset Management important?

**Ensuring the right assets, are in the right place, at the right time, managed by the right people.**

- What are the required levels of service and performance?
- How will demand for this change over time?
- What is the current state of the assets?
- Are they capable of meeting demands now and in the future?
- What are the risks that the assets may not meet requirements?
- What are the best strategies for O&M, renewal, and upgrade?
- How much will providing the service cost over the long term?



# Benefits of asset management



- Making more effective and sustainable decisions for infrastructure,
- Improving customer service and satisfaction,
- Improving financial efficiency,
- Demonstrating strong governance, and
- Effectively managing risks.





# Avoiding the “build-neglect-rebuild” cycle

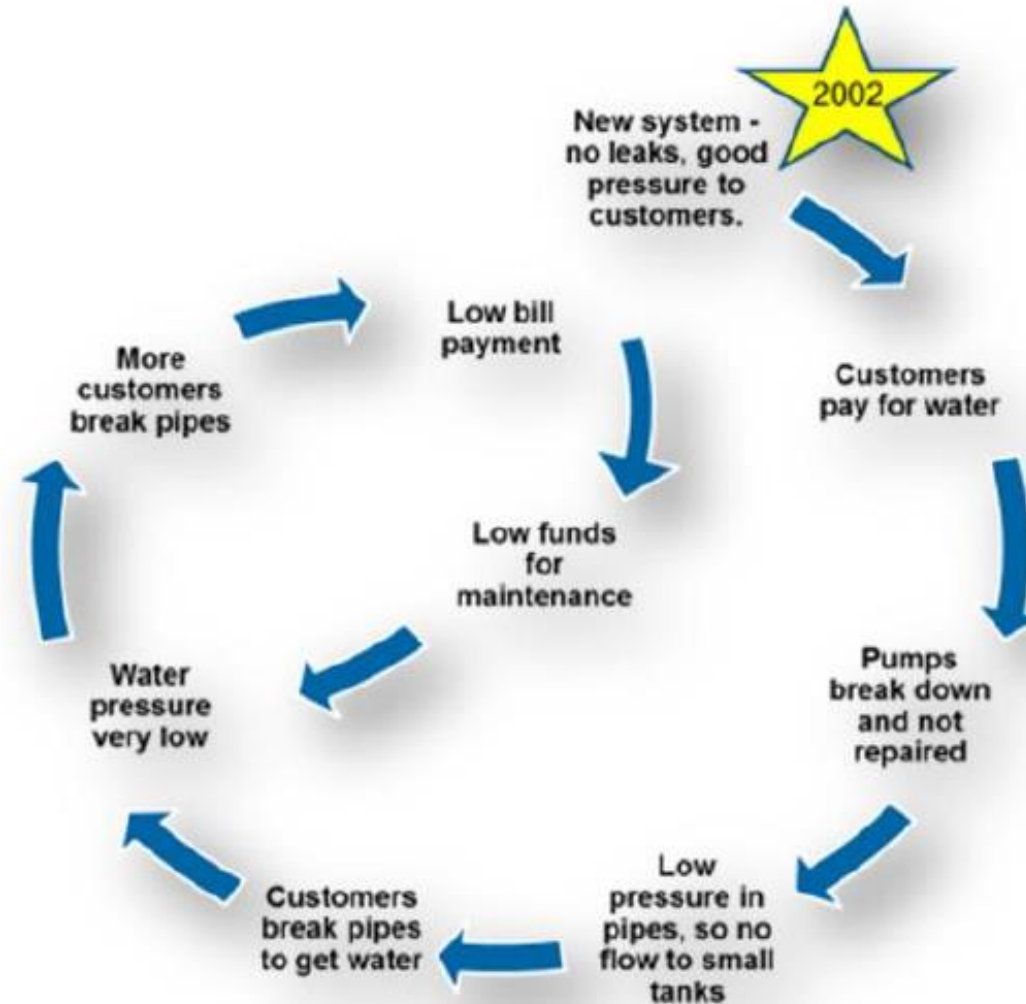
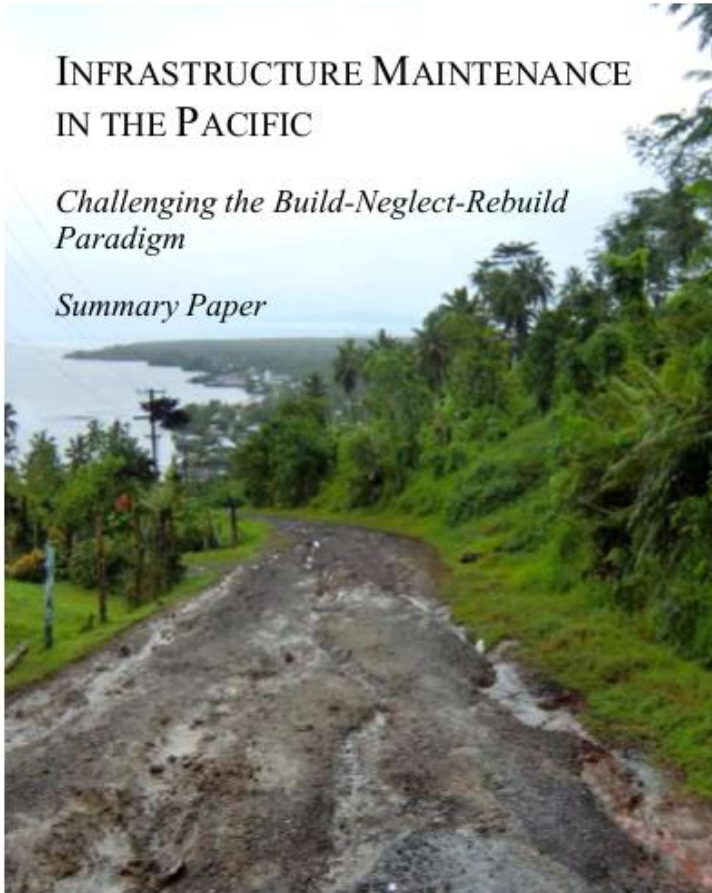


Pacific Region Infrastructure Facility

## INFRASTRUCTURE MAINTENANCE IN THE PACIFIC

*Challenging the Build-Neglect-Rebuild  
Paradigm*

*Summary Paper*





# What does good AM look like for Samoa Water Authority?

Planning and Constructing New Infrastructure to cater for Demand and Population Growth



Excellent Service Delivery and Customer Satisfaction



Acceptable Water Quality (incl Treated WW)



Cost-effective O&M







# Asset Management Training

# 2023 Training Program Participants



30 participants 5 water utilities across four countries.



**UNELCO**





# 2023 Training Program



30 Participants across 4 countries and 5 water utilities with targeted mentoring and development of AMMA and AM improvement plans.

## Facilitated Online Training

AM 101 - Introduction to Asset Management

CC 101 - Climate Change

AM 202 - Understanding Requirements

AM 203 - Lifecycle Planning

AM 204 - Asset Management Enablers



FOCUS on Asset Management Maturity (AM 308)



# 2024 Training Program Participants



30 participants 12  
water utilities across  
eight countries





# 2024 Training Program



## Online Training (self-paced)

AM 101 -  
Introduction to  
Asset Management  
CC 101 – Climate  
Change

## Facilitated Online Training

AM 202 - Understanding  
Requirements

AM 203 - Lifecycle Planning

AM 204 - Asset Management  
Enablers

FOCUS on Levels of Service (AM 431)





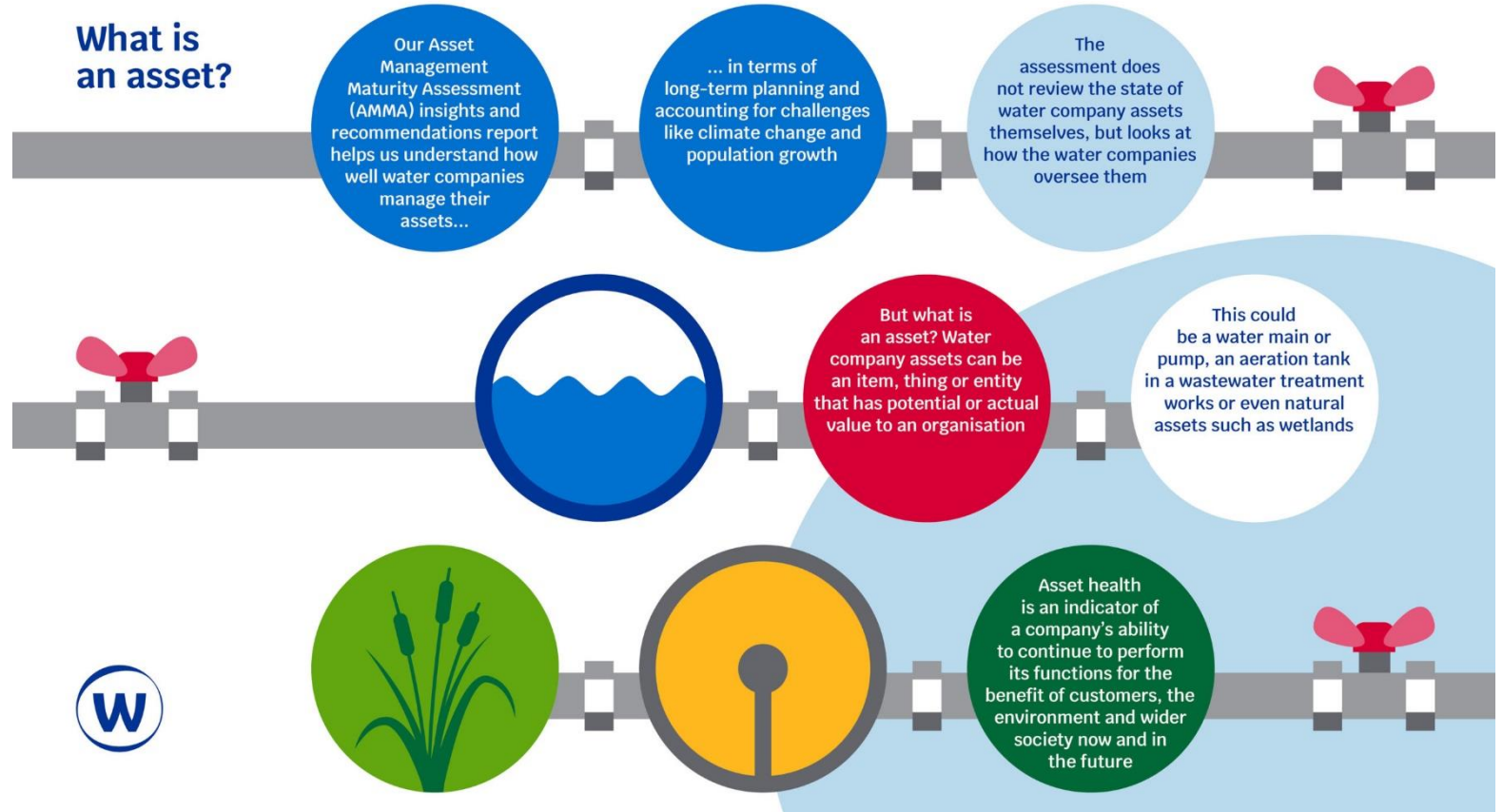
# Guide to Asset Management Improvement Planning



# Why assess asset management maturity? UK



“Need to secure resilient water services, but first we need to assess where water companies are now, so that can find out where improvements are needed.” *Ofwat UK*



# Why assess asset management maturity? NZ



The biggest single challenge in the infrastructure sector may be the cost of repairing or replacing infrastructure that's wearing out.

*NZ Infrastructure Commission, November 2024*



Taking care of tomorrow today  
*Asset Management State of Play*

November 2024

TeWaihangā.govt.nz

## Third of Wellington's most critical drinking water pipes in poor condition



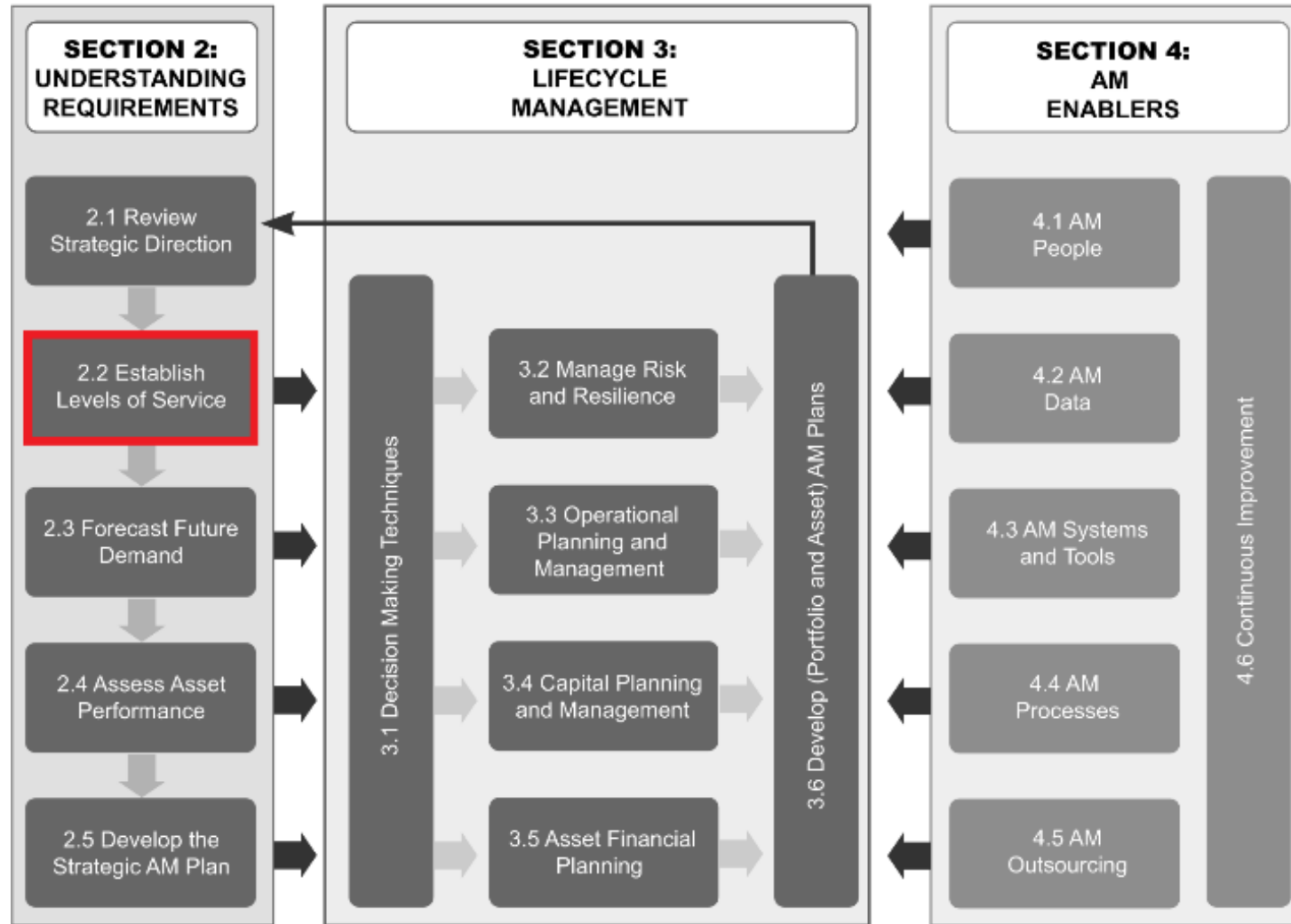
By **Georgina Campbell**

Senior Multimedia Journalist · NZ Herald · 9 Aug, 2021 07:00 AM · 3 mins to read





# Asset Management Framework



<https://apopo.co.nz/product/asset-management-maturity-assessment-tool-xlsx>



# Assessing Asset Management Maturity



Maturity Level	Generic Description
<b>Aware</b> (0-20)	The organization demonstrates an awareness of this element of asset management planning.
<b>Basic</b> (21-40)	The organization has a basic level of understanding of this element, this may include the existence of a repeatable process.
<b>Core</b> (41-60)	The organization has a moderate level of understanding and applying this element, this is likely to include the existence of well-defined and repeatable processes.
<b>Intermediate</b> (61-80)	The organization has an intermediate level of understanding and applying this element. The organization is managing this aspect with well-defined and repeatable processes.
<b>Advanced</b> (81-100)	The organization has an advanced level of understanding and applying this element. The organization has optimized their processes for managing this aspect.



# Assessment Tool



Section 3 Asset Management Maturity Assessment Tool (2020)				Maturity Levels					Current Score	Appropriate Target in 3 years	
IMM Ref	Question	Section	Questions	Aware	Basic	Core	Intermediate	Advanced			
Portfolio: Water Supply				0-20	21-40	41-60	61-80	81-100			
Implications/ risks of not achieving appropriate maturity											
Understanding and Defining Requirements											
2.3	3	<b>Demand Forecasting and Management</b>	<p>How well does your organisation:</p> <ul style="list-style-type: none"> <li>· forecast demand for its services?</li> <li>· assess the possible impact on its asset portfolios?</li> <li>· evaluate demand management options as part of its network and/or project analysis?</li> </ul>	<p>The organisation does not adequately predict and plan for demand changes, possibly resulting in service shortages, demand constraints, unexpected funding requirements, reduced levels of service.</p>	<p>Future demand requirements generally understood but are not well documented (evident in responses to interview questions).</p>	<p>Demand forecast trends based on knowledgeable staff.</p> <p>Demand drivers are understood and described.</p> <p>Demand management strategies are being developed.</p> <p>Some basic demand information is being collected and monitored.</p>	<p>Demand forecasts are based on relevant primary demand factors (e.g. population growth) and extrapolation of historic demand trends.</p> <p>Demand forecasts are presented in the AMP with supporting assumptions.</p> <p>Risk associated with demand change are broadly understood and documented in the AMP.</p> <p>Strategies to manage demand (demand management strategies, asset-responses) are documented in the AMP.</p> <p>Demand management is considered in investment evaluations.</p>	<p>Demand forecasts are based on analysis of historic demand trends and all material demand factors.</p> <p>A range of demand scenarios is developed (e.g. high/medium/low) and presented in the AMP with supporting assumptions.</p> <p>Strategies to manage demand (demand management strategies, asset-responses) are documented in the AMP with supporting evidence that costs and benefits have been evaluated in determining the best strategy.</p> <p>Demand management is considered in all strategy and capital project decisions.</p>	<p>As for Intermediate, plus:</p> <p>Risk assessment carried out for different demand scenarios with mitigation actions identified and evaluated in determining the appropriate demand forecast scenario for AM planning.</p> <p>Sensitivity testing is carried out to determine confidence levels in demand forecasting scenarios.</p> <p>Demand risks are included in organisational risk registers.</p>	25	50

<https://apopo.co.nz/product/asset-management-maturity-assessment-tool-xlsx/>

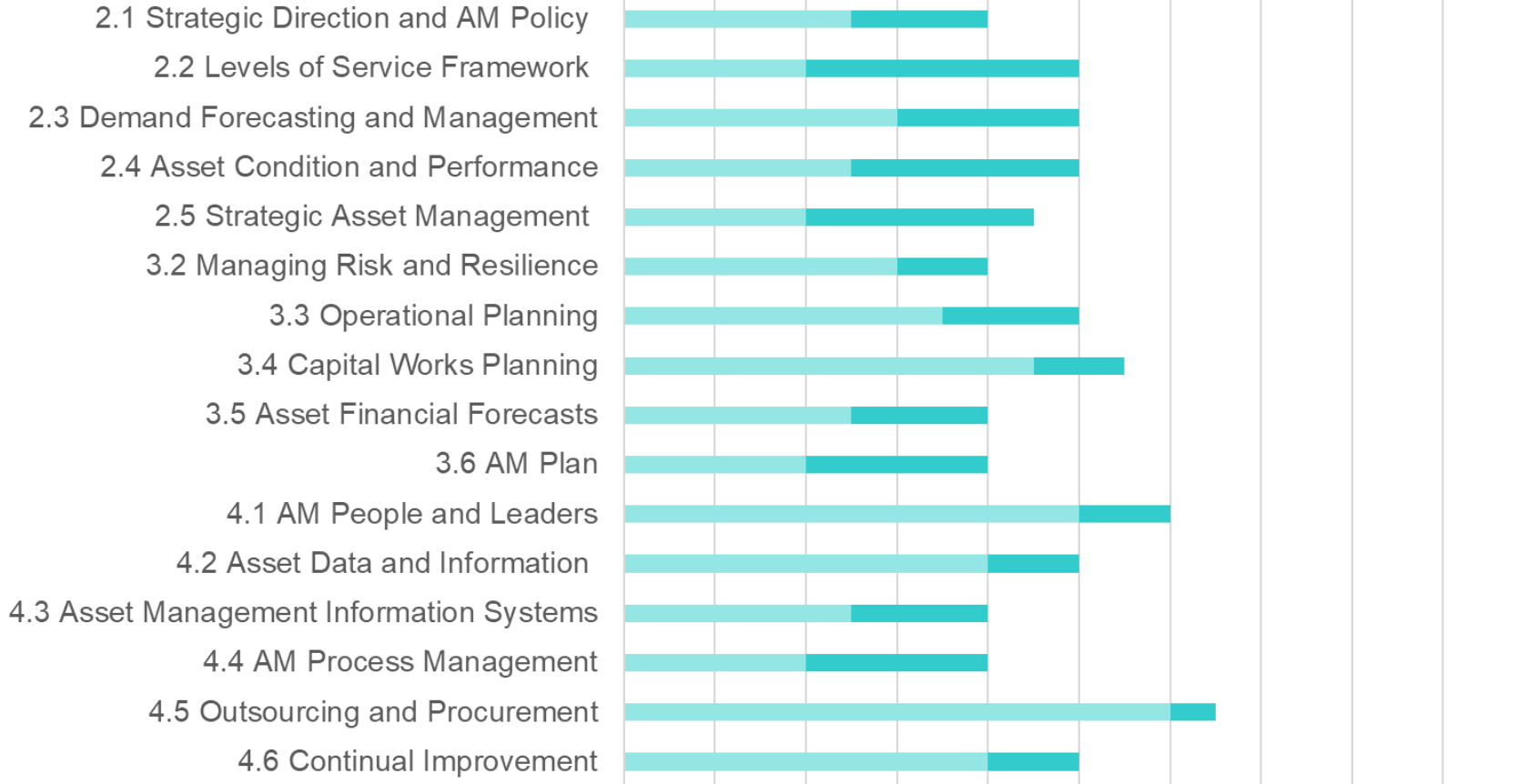




# Developing a list of improvements



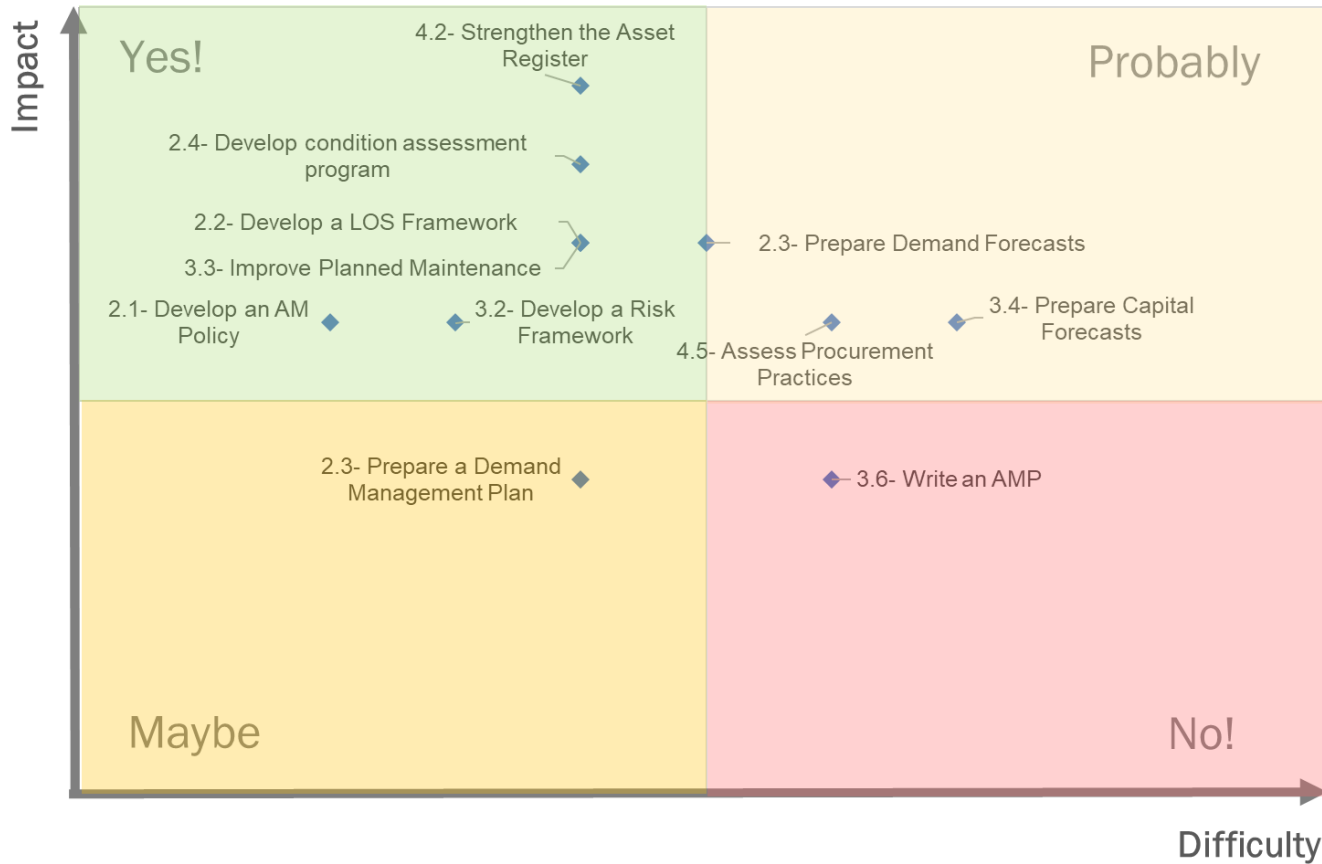
Maturity Levels				
Aware	Basic	Core	Intermediate	Advanced
0-20	21-40	41-60	61-80	81-100



■ Current      ■ 3-Year Target



# Developing an Improvement Plan



### PRIF-PWWA Strengthening Asset Management Project 2023

#### Improvement Action - Update and embed AM Policy

**IIMM Section**      2.1 Analysing the Strategic Direction (AM Policy and Objectives)  
 Digital Badge      <https://apopo.co.nz/section/asset-management-strategic-direction/>

**Current status**

SWA had an existing policy from 2001 which was deemed no longer relevant after review in 2023. A completely new AM Policy has been written, discussed and approved by Management. The AM Policy is now pending approval of the SWA Board of Directors before rollout to the rest of the organisation.

**Why is this improvement action important?**

AM policy review and update needs to be prioritised to show commitment of SWA to asset management (high-level buy in from Board and Management). Needs to be delivered within this financial year. AM Team to lead with assistance from the Senior Policy Analyst and Legal. Inhouse work with options to get a consultant for external advice. The AM Policy will help to implement the actions in the AMPs. Everyone in the organisation needs to be aware of it. Everyone will benefit from having the AM policy in place (helps with SWA's financial sustainability). Also supports the AMP works

**Scope Description**

The AM Policy was written as a very high-level document and in accordance to the ISO 55000 standards. The policy is two pages long and clearly states SWA's commitment to AM, including the responsible parties.

**Risks of not doing this improvement**

AMPs will not be used or even prioritised

Predecessors	Dependencies
None	Critical for implementation of the AMPs and Masterplan but can be prepared in parallel (doesn't need to be completed before preparing AMP)

Project Team	Timeframe	Duration to complete	External Resource requirements
AM Team (yet to be recruited)	Within 1 Financial year		External Adviser/Consultant to provide guidance (TA ADB WASH project)
Start date	31/10/2023	Completion date	TBC

Project risks	Internal commitments (months by staff)	Comments on staffing
Limited human resources or staff turnover	SL	Two weeks for internal staff member plus two weeks support from an external consultant under the ADB Pacific Wash program technical support.
	0.5	

**External cost estimate**

Comments on cost including potential donors and linked donor projects

\$ -      Funded under ADB Pacific Wash program technical support.



We need to look after our existing assets better, as well as plan for, and build better, to improve access to safe drinking water in the future.

# 7.6 million

**Pacific Islanders will require new safe drinking water facilities by 2030 for the Pacific to meet the global SDG for water**

Estimate by SPC, WHO, UN-Habitat, & UNICEF, based on country reporting







Pacific Region Infrastructure Facility

[theprif.org](http://theprif.org)