

A vertical waterfall cascading down a mossy, rocky cliff face. The water is white and frothy as it falls, surrounded by lush green ferns and vegetation. The scene is captured from a slightly elevated angle, looking down at the waterfall.

# SWA ASSET MANAGEMENT

Our Strategy from Experience

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# OUTLINE

- Who we are
- Our assets strategy
- Why good AM is important to us
- Our AM journey
- Strategic Plans and Frameworks Map
- Our Assets Strategy in Action
- Asset Management Maturity Assessment
- Key Takeaways – How we made it work

# THE SAMOA WATER AUTHORITY

2024



27,790

Water Connections (Active)



14

Water Treatment Plants/ Facilities



30

Water Sources (Surface Water)



1421

Length of Water Distribution Network (km)



9

Booster Pump Stations



83

Reservoirs



58

Boreholes



124

Wastewater Connections



1

Wastewater Treatment Plants



114

Sewer Pump Stations



14

Length of Sewer Mains (km)

## OUR KEY FACTS

### MANDATE

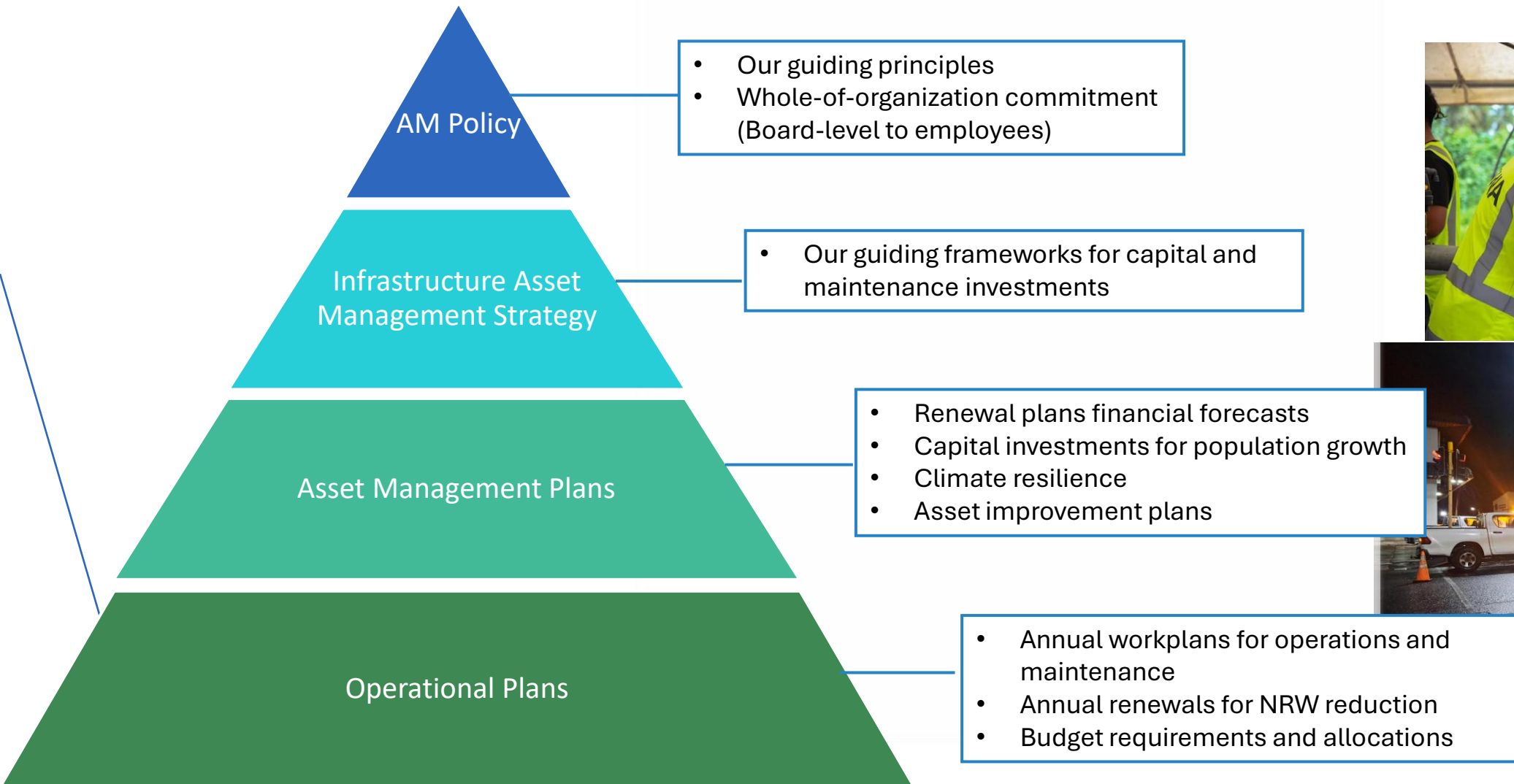
The Samoa Water Authority operates under and pursuant to:

1. Samoa Water Authority Act 2003
2. Samoa Water Authority (Sewerage and Wastewater) Regulations 2009
3. Public Bodies (Performance & Accountability) Act 2001
4. Public Finance Management Act 2001
5. Cabinet Directives
6. Samoa National Drinking Water Standards 2016
7. SWA Engineering Standards 2014
8. National Sanitation Policy
9. Water Allocation Policy

### POPULATION COVERAGE

WATER: 90%

# OUR ASSETS STRATEGY



# OUR ASSETS STRATEGY CONT'D

## Asset Management Policy

- Whole-of-organization commitment and accountability

## Asset Management Plans

- Asset Registers
- Condition Assessments
- Criticality Assessment
- Risk Management
- Improvement Plans

## Investment Prioritization

- Risk-based decision making
- Demand and Growth
- Budget Availability
- Return on Investment or NPV
- Criticality

## SWA Corporate Plan (2024-2027)

- Annual Key Performance Indicators (Renewals, New Works, Maintenance, Financials etc)

## Divisional Plans

- Key Performance Indicators for Employees
- Divisional KPIs linked to Asset Management (renewals, extensions, etc.)



# WHY GOOD ASSET MANAGEMENT IS IMPORTANT TO US

## THE CHALLENGES

- Aging infrastructure
- Reactive maintenance
- Unknown asset conditions
- Cumulative renewal expenses
- Climate change
- Limited funding

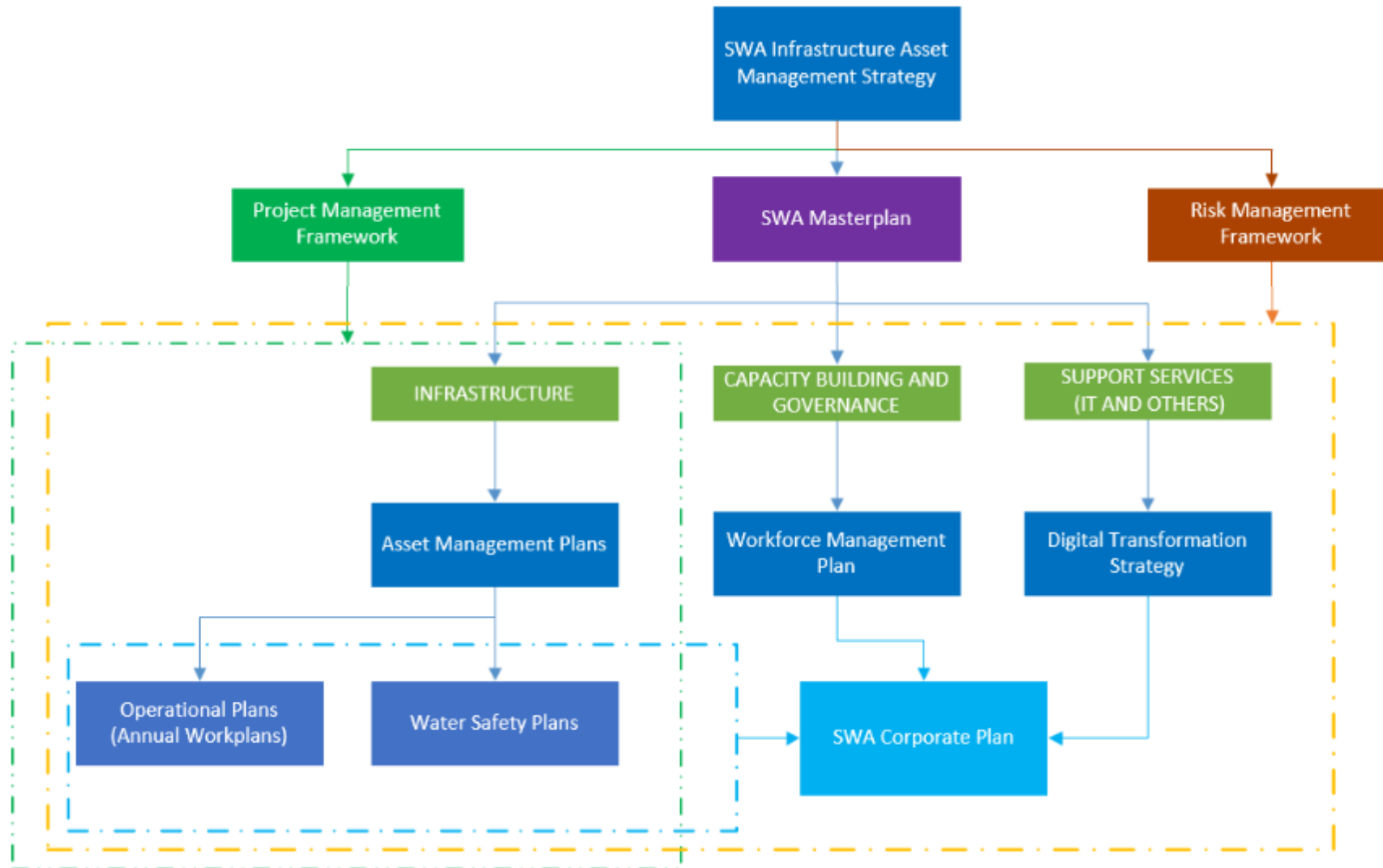




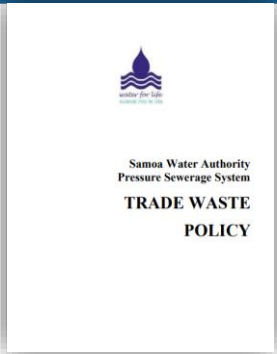
# OUR ASSET MANAGEMENT JOURNEY



# OUR STRATEGIC PLANS AND FRAMEWORKS MAP

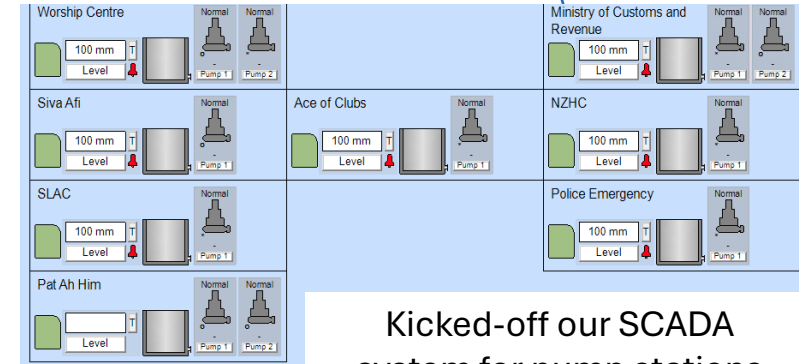


# OUR ASSETS STRATEGY IN ACTION



Updated our Trade Waste Policy

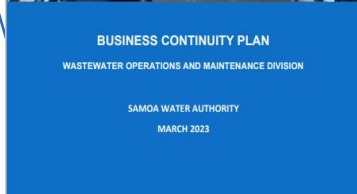
## Asset renewals and network extensions



Kicked-off our SCADA system for pump stations

## ASSET MANAGEMENT PLANS

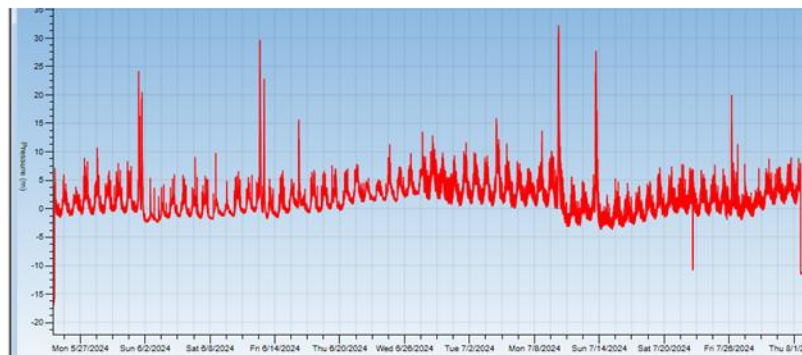
### Formalized our BCPs



### Planned/Reactive Maintenance recorded in CMMS

Printed	W/O No	Asset No	Description
<input checked="" type="checkbox"/>	2958	SWA48	Extra parts to complete routine services.
<input checked="" type="checkbox"/>	2955	PSU088D1.5	Replace ESPS 200 along with EPC power for control panel off
<input checked="" type="checkbox"/>	2954	PSU089D1.5	Replace ESPS 100 (sensor) for pump station
<input checked="" type="checkbox"/>	2957	M3.43A	Loose fitting for biolifter blower causing bad odour
<input checked="" type="checkbox"/>	2956	V3.16	UV #3 valve failed to open
<input type="checkbox"/>	2953	PSU101S1.1	Testing Stores Module - Assigning items from Stores Module

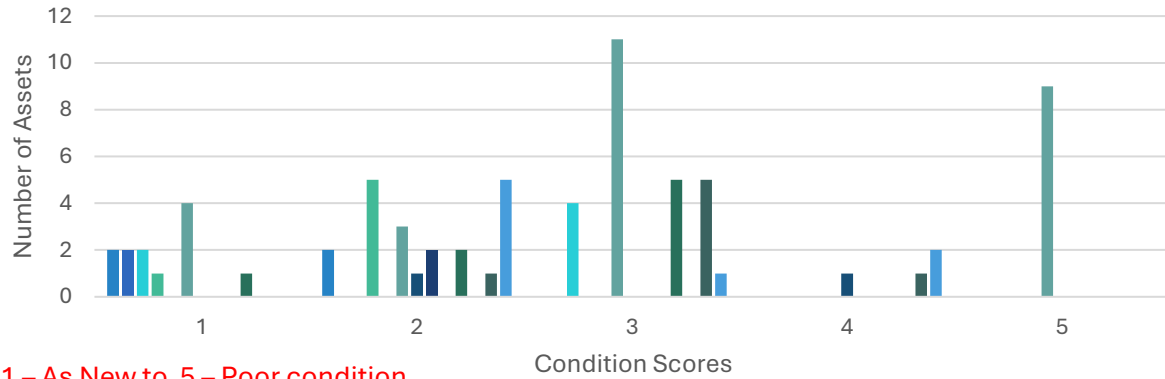
### Hydraulic modelling for Network Optimization



Legend  
 ■ WWTP  
 ▲ Max DS Head (m)  
 ▲ <20  
 ▲ 20-30  
 ▲ 30-40  
 ▲ >40

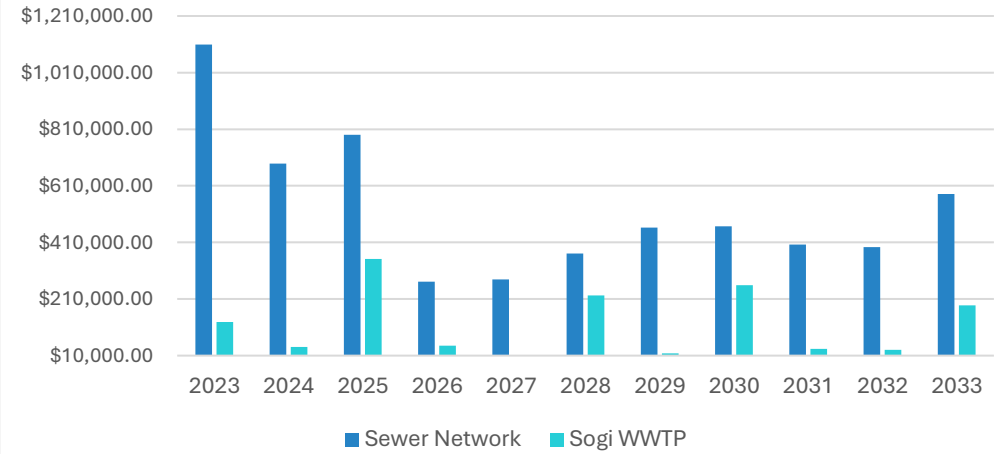
# OUR ASSETS STRATEGY IN ACTION - WASTEWATER SERVICES

Condition Assessment Results - Sogi WWTP

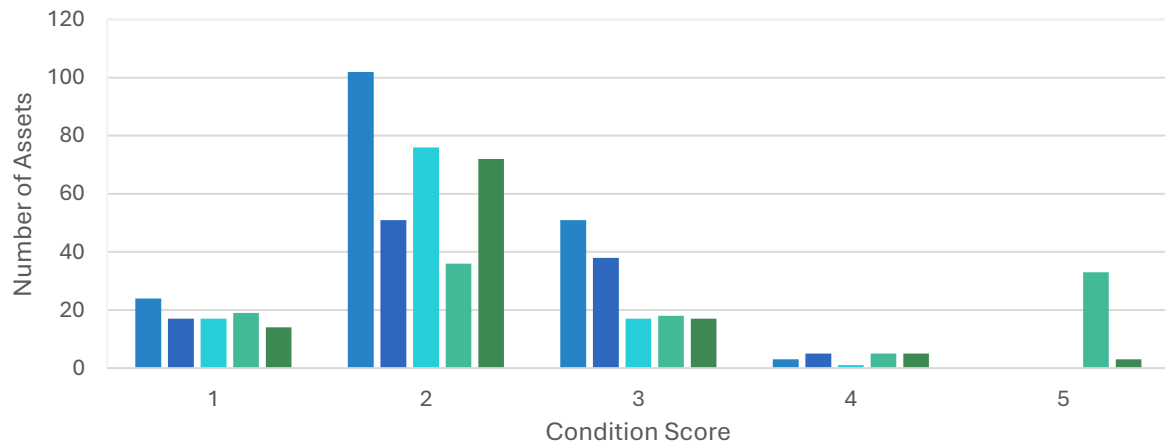


1 – As New to 5 – Poor condition

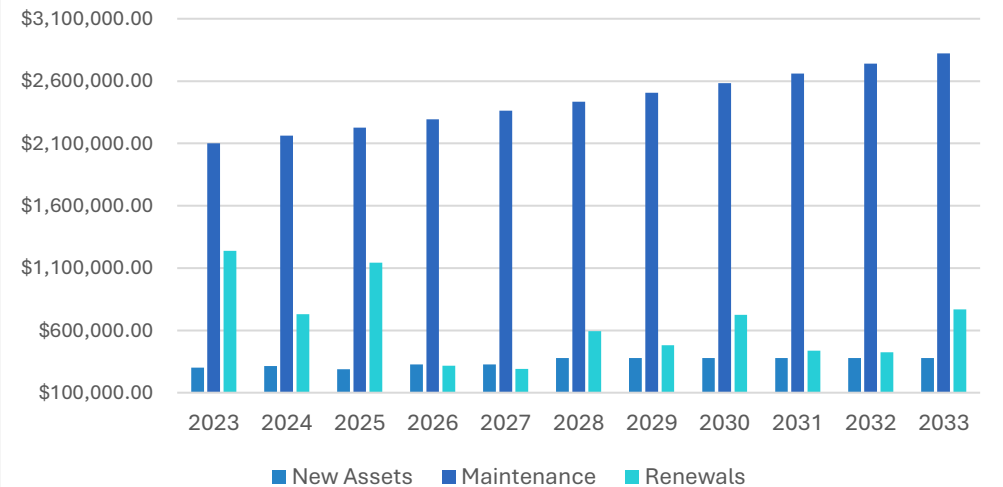
Sewer Assets Renewal 10 Year Projections



Condition Assessment Results - Pump Stations

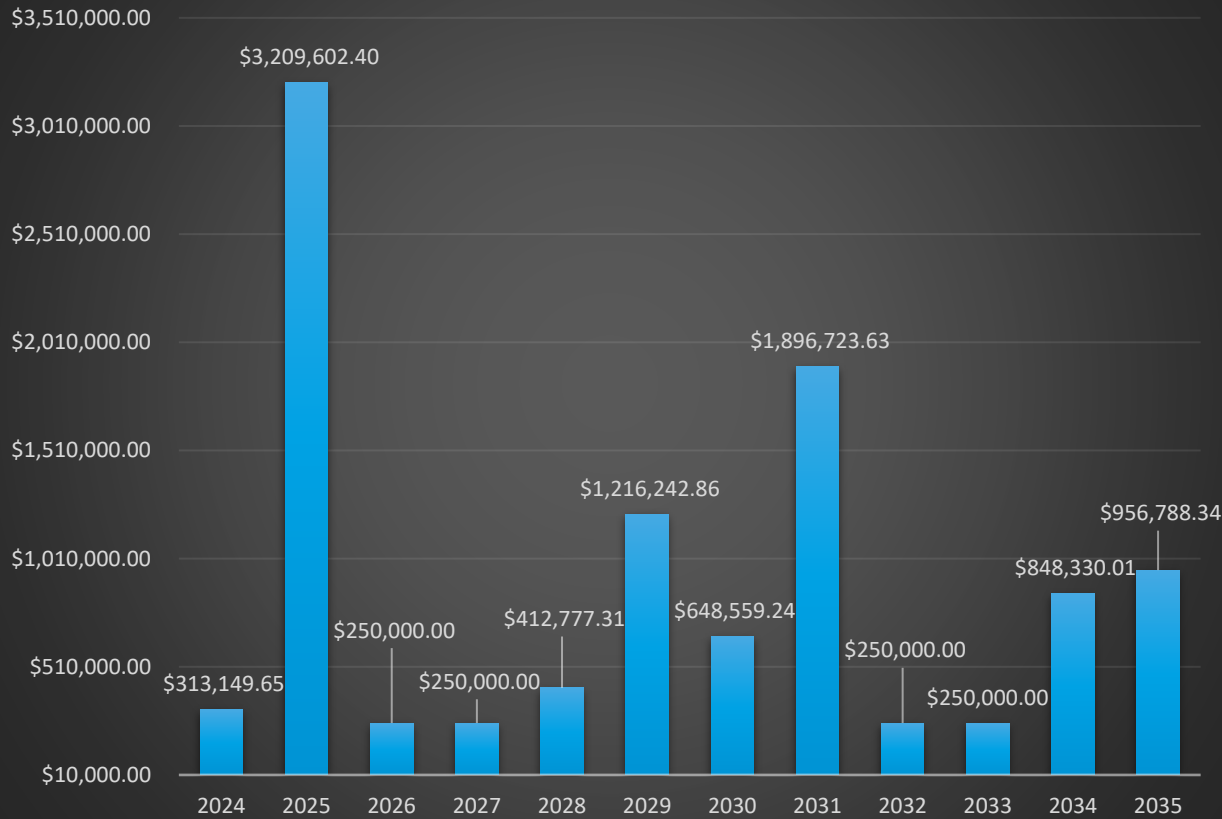


Planned Maintenance & Capital Expenditure

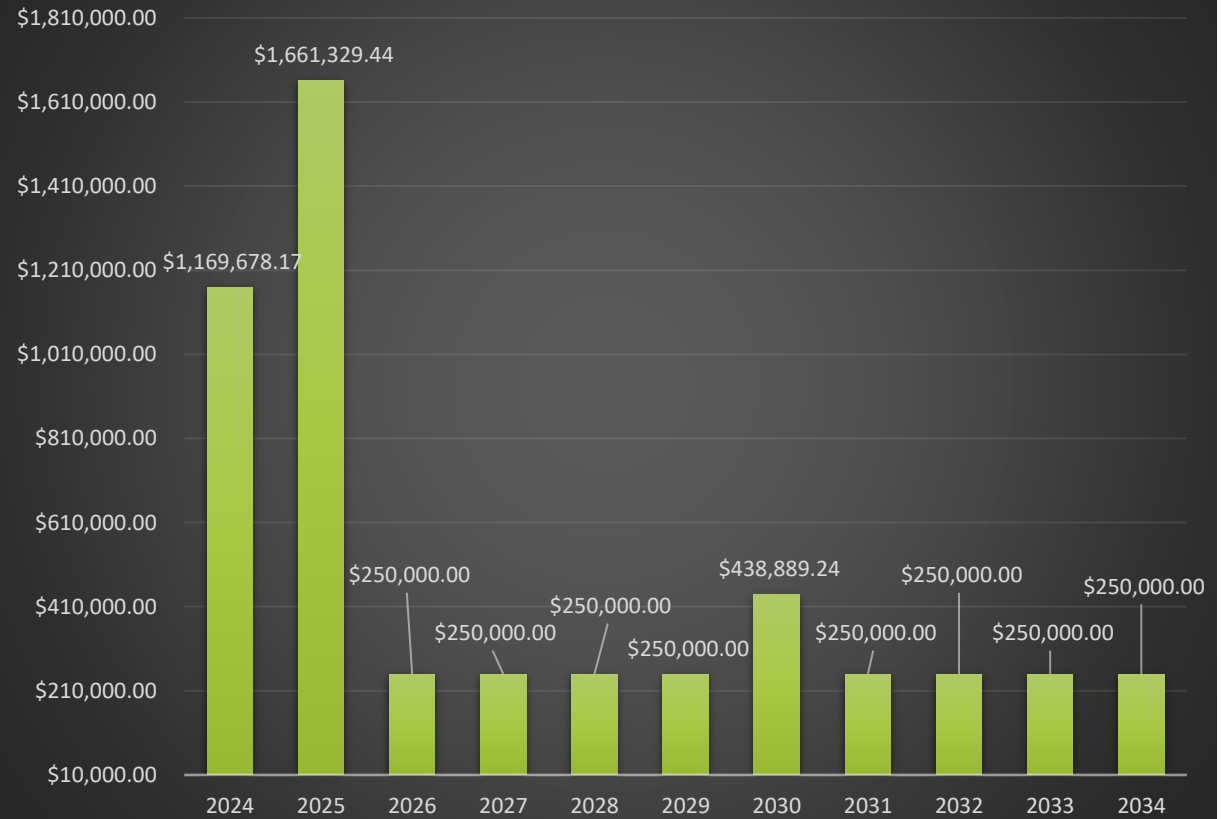


# OUR ASSETS STRATEGY IN ACTION – WATER SUPPLY

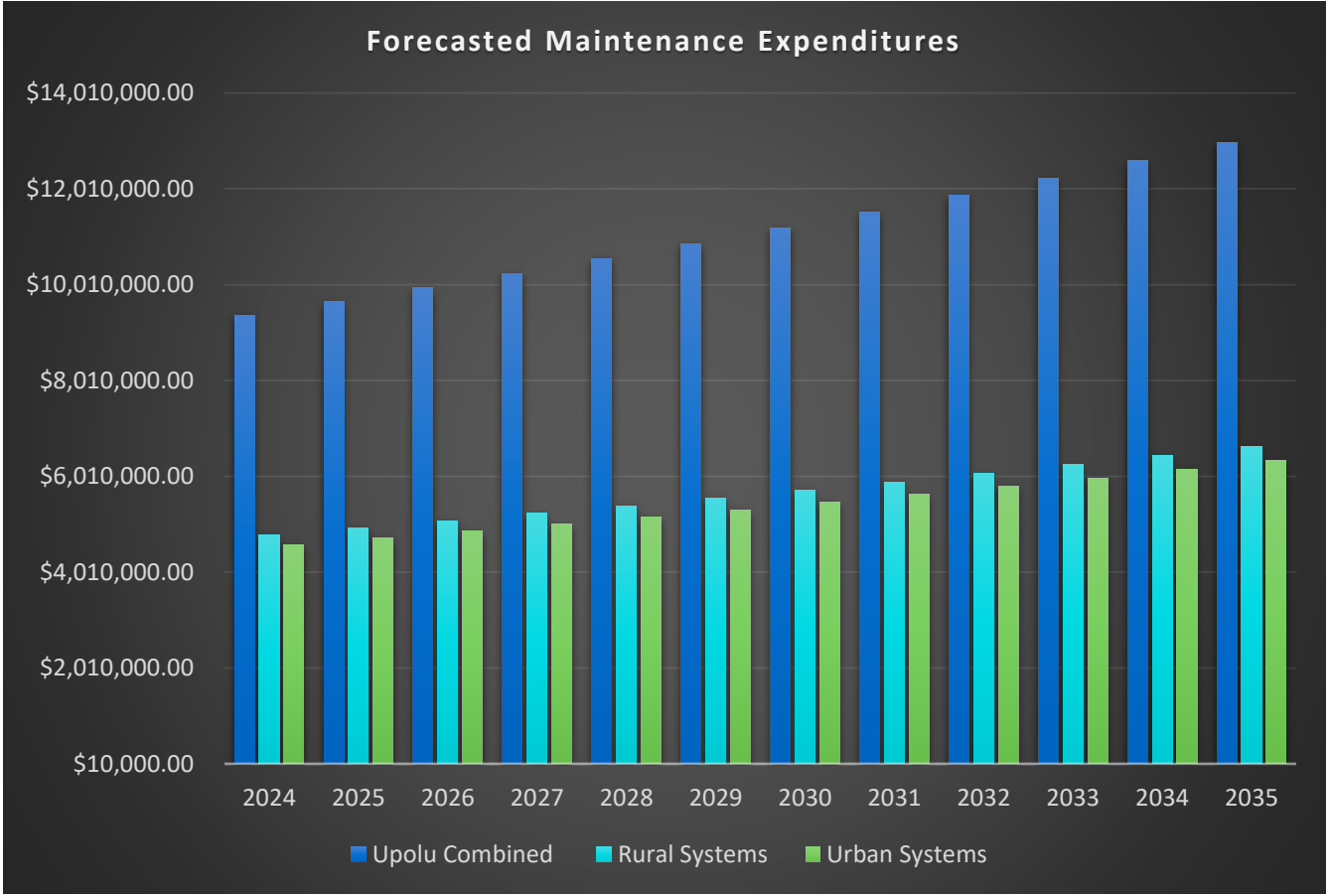
### Forecasted Renewals for Urban Assets



### Forecasted Renewal Expenditures for Rural Assets



# OUR ASSETS STRATEGY IN ACTION – WATER SUPPLY



# ASSET MANAGEMENT MATURITY ASSESSMENT



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

# KEY TAKEAWAYS – HOW WE MADE IT WORK



# ACKNOWLEDGEMENT

## **ASIAN DEVELOPMENT BANK – WASH TA TEAM**

- MR. DEAN TAYLOR
- MR. MARK ELLERY
- MS. BRONWYN POWELL
- MS. SINEAD LEHANE

## **PRIF**

- MS. CHRISTINE MCCORMACK



THANK YOU