

2018-2028 PROPERTY ASSET MANAGEMENT PLAN
He Rautaki Whakahaere Rawa mō Ngā Hangatanga Whānui

WATER & WASTE BUILDINGS

NGĀ WHARE PUTUNGA WAI - PUTUNGA PARANGA

VOLUME EIGHT | PUKAPUKA TUAWARU



Mountain to Sea
Te Kaunihera-ā-Rohe o Ngāmotu
NEW PLYMOUTH DISTRICT COUNCIL
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DOCUMENT CONTROL

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This volume provides details of the asset lifecycle management for the Water and Waste Buildings asset category of the Property Asset Management Plan (AMP). The framework and key elements of the overall asset management plan are outlined in Table 1.

Table 1 Asset management document structure

No.	Document Name	Key Document Contents
1	Long Term Plan (LTP)	Infrastructure Strategy <ul style="list-style-type: none"> • Strategic Framework • Guiding Themes • High Level Information for Each Asset Class Council Services <ul style="list-style-type: none"> • High Level Information • Levels of Service • Financial Plan
2	Asset Management Strategy	General Asset Management Principles and Overview
3	Asset Class General Volumes	General Information and Glossary about each asset class <ul style="list-style-type: none"> • Executive Summary • Introduction • Levels of Service • Future Demand • Risk Management Plan • Financial Summary • Plan Improvement and Monitoring

4	Asset Category Lifecycle Management Volumes	Asset Life Cycle Management for each asset category within each asset class <ul style="list-style-type: none"> • Description • Condition • Remaining Lives • Valuation • Operations & Maintenance • Renewals • Acquisition and Augmentation • Disposals • Annual Work Plan • Risk Management • Financial Summary • Improvement Plan
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Purpose

The purpose of Water and Waste Buildings is to provide housing and office space for Water and Waste staff and to house and protect key operational equipment such as pump stations.

Levels of Service

There are no specific levels of service related to the operation of these buildings, but the activity generally supports the Water and Waste team in delivering their levels of service.

Future Demand

We do not anticipate augmentation of facilities due to future demand over the period of the AMP.

Note: All financial forecasts are shown in inflation adjusted dollar values.

2. LIFECYCLE MANAGEMENT PLAN

2.1 Asset Description

These assets include buildings located at the water treatment plant, the wastewater treatment plant, and a number of minor water/waste pump stations located around the district, including at the Colson Road solid waste disposal facility.

The data presented in this AMP on the quantity and type of the assets is classed as grade **B – Reliable** due to the asset inventory being well maintained and updated in EAM.

2.2 Asset Condition

The buildings are managed by the Property team in conjunction with the Water and Waste team. The condition of the fabric of the buildings and the individual internal components e.g. Heating Ventilation and Air Conditioning (HVAC), fixtures and fittings, electrical equipment are assessed and recorded on Property team registers.



2. LIFECYCLE MANAGEMENT PLAN

2.3 Asset Remaining Lives

The assumed expected lives of each building has been assessed and recorded in our Enterprise Asset Management (EAM). Tables 2 - 4 show the install date and assumed expected lives recorded in EAM. Assumed expected lives are based on best practice property advice and experience.

Table 2 Waste Water Treatment Plant administration building expected asset lives

Building Name	Construction Year	Age (years)	Remaining Life (years)	Expected Life (years)
Electrical Systems	1971	40	45	0
Fire Systems	1985	40	31	9
HVAC Systems	1980	30	36	1
Lifts & Escalators	2005	40	11	29
Plumbed Systems	1982	40	34	6
Roof Cladding	2010	40	6	34
Site Improvements	2005	35	11	24
Fit Out	1983	30	33	2
Floor Coverings	1980	30	36	1
Miscellaneous	2005	30	11	19
Security & Access Systems	1995	20	21	-1
Structure	1970	80	46	34

Table 3 New Plymouth Water Treatment Plant administration building asset remaining lives

Building Name	Construction Year	Age (years)	Remaining Life (years)	Expected Life (years)
Electrical Systems	1984	40	32	8
Fire Systems	1984	40	32	8
HVAC Systems	1984	30	32	5
Lifts & Escalators	1984	40	32	8
Plumbed Systems	1984	40	32	8
Roof Cladding	1984	40	32	8
Site Improvements	1984	35	32	3
Fit Out	1984	30	32	5
Floor Coverings	1984	30	32	3
Miscellaneous	1984	30	32	-2
Security & Access Systems	1995	20	21	4
Structure	1984	80	32	48

2. LIFECYCLE MANAGEMENT PLAN

Table 4 Minor buildings asset remaining lives

Building Name	Construction Year	Age (years)	Remaining Life (years)	Expected Life (years)
Corbett Park SPS Building	2009	7	53	60
Inglewood Wastewater Treatment Plant/ Pond Pump Station	1999	17	43	60
Mangati Sewer Pump Station/ Sewer Pump Station Building	1979	37	28	65
Waitara Outfall Pump Station Building	1976	40	20	60
New Plymouth Waste Water Treatment Plant/ Dewatering Building	1995	21	39	60
New Plymouth Wastewater Treatment Plant/ Aeration Building	1989	27	33	60
New Plymouth Wastewater Treatment Plant/ Disinfection Building	1984	32	28	60
New Plymouth Wastewater Treatment Plant/ Milliscreen Building	1984	32	28	60

New Plymouth Wastewater Treatment Plant/ Storage Shed	2012	4	46	50
New Plymouth Wastewater Treatment Plant/ Return Sludge Pump House	1984	32	28	60
New Plymouth Wastewater Treatment Plant/ TDF Building	2000	16	44	60
New Plymouth Wastewater Treatment Plant/ Workshop	1984	32	28	60
New Plymouth Wastewater Treatment Plant/ Blower building	2011	5	55	60
Shearer Reserve SPS Building	2009	7	53	60
Te Henui Pump SPS Building	1982	34	26	60
Waitara Wastewater SPS Building	1992	24	36	60
Weka Street SPS Building	1955	50	10	60
Henwood Road Reservoir/Inlet Building	1991	25	25	50

2. LIFECYCLE MANAGEMENT PLAN

Henwood Road Reservoir/Outlet Building	1984	32	18	50
Inglewood Water Treatment Plant/ Building	1993	23	47	70
Inglewood Water Treatment Plant/ Valve Chamber	2000	16	34	50
Mangorei Reservoir Outlet Building	2000	16	34	50
Motunui SPS Building	1986	30	30	60
Mountain Rd Reservoir Inlet Building	1990	26	34	60
Mountain Rd Reservoir Outlet Building	1990	26	34	60
New Plymouth Water Treatment Plant/Inlet Building	2010	6	44	50
New Plymouth Water Treatment Plant/PAC Building	2010	6	44	50
New Plymouth Water Treatment Plant/Pipe Store	1983	33	27	60
New Plymouth Water Treatment Plant/SLU (Sludge) Pump House	1997	19	41	60

New Plymouth Water Treatment Plant/UTL Waterworks Shed	2004	12	48	60
NPWTP Reservoir Valve Shed	1978	38	32	70
Oakura Water Supply Treatment / Building	1985	31	14	45
Tikorangi Water Storage Unit/Pump Station Building	2003	13	52	65
Veale Road Reservoir Inlet building	1981	35	35	70
Veale Road Reservoir Outlet / pump building	1986	30	40	70
Waitara Transfer Station/Staff Room and Disposal Area Canopy	1993	23	57	80

Information in the EAM asset inventory is componentised at a high level only. We break components down further for use in asset planning in other Property systems. This is currently under review and we plan to compile and retrofit more componentised information into EAM in the future. **This is recorded as an action in Section 5 - Improvement and Monitoring Plan.**

Note: The buildings at Colson Road Landfill and Colson Road Transfer Station are not included in the above tables due them being managed by the resident contractor rather than our property team.

The data presented in this AMP on the remaining life of assets is classed as grade **B - Reliable** due to the data being based on sound knowledge, standards and guidelines.

2.4 Asset Valuation

The value of Water and Waste buildings as at 30 June 2016 is shown in Table 5.

Table 5 Asset valuation

Description	Replacement Value (GRC) (\$)	Annual Depreciation (\$)	Optimised Depreciated Replacement Cost (ODRC) (\$)
Waste Water Treatment Plant Main Building	4,107,000	55,493	1,670,993
Water Treatment Plant Main Building	1,370,000	21,722	677,091
Material Recovery Facility, Colson Road	2,705,300	67,625	2,637,700
Other Minor Buildings (Inc. Colson Road)	17,817,500	345,570	9,642,616
Total	25,999,800	490,410	14,628,400

The assets were revalued during the 2016 statutory valuation. The accuracy of the valuation data is classed as **B - Reliable** due to the asset inventory being up to date and the values being prepared independently by Telfer Young consultant valuers.

2.5 Operations and Maintenance

The Property team conduct general operations and maintenance of these buildings in conjunction with the Water and Wastes team. This includes managing the running costs of the buildings e.g. energy, rates etc. and the regular scheduled maintenance of major components and fittings e.g. fire protection, HVAC etc.

The overall operational expenditure (Opex) forecasts that include the operation and maintenance of Water and Waste buildings are included in the Water Supply (17), Waste Water (18) and Waste Management and Minimisation (15) budgets and the General AMP Volumes covering these assets. The Property team utilises these budgets for the operation and maintenance of the Water and Waste buildings.

2.6 Renewals Plan

Renewals projects are aimed at maintaining assets in a safe and fit for purpose condition by replacing at or before the end of their useful life. We select renewals using the general principles described in the Asset Management Strategy.

A provision for routine minor renewals is included in the Water Supply AMP: Volume 2 – Water Treatment Plant.

2.7 Acquisition and Augmentation Plan

Acquisition

No assets acquisitions are planned during the period of the AMP.

Level of Service

No expenditure on level of service projects is planned during the period of the AMP.

Growth

No expenditure on growth projects is planned during the period of the AMP.

2.8 Disposal Plan

Disposal is the retirement or sale of assets when they become surplus or superseded by new or improved systems. Assets may become surplus to requirements for any of the following reasons:

- Under-utilisation
- Obsolescence
- Provision exceeds required level of service
- Replacement before end of predicted economic life
- Uneconomic to upgrade or operate
- Policy changes
- Service provided by other means (e.g. private sector involvement)
- Potential risk of ownership (financial, environmental, legal, social)

No asset disposals are planned over the 10 year AMP period.

3. RISK MANAGEMENT PLAN

3.1 Critical Assets

Criticality assessments for property assets have not yet been conducted but assets are managed based on the knowledge and experiences of the Property and Water and Waste teams. **This is an asset integrity issue and is recorded as an action in Section 5 – Improvement and Monitoring Plan.**

3.2 Risk Assessment

Details of our Risk Management Framework are included in section 6.2 of the Property General AMP volume and section 7 of the Asset Management Strategy.

3.3 Infrastructure Resilience Approach

We have developed contingency plans and business continuity plans to facilitate continued operations for our staff based at the Water and Waste Buildings. These plans are tested regularly and refined where required.



4. FINANCIAL SUMMARY

No specific capital expenditure (Capex) is included in this AMP volume.

The overall Opex forecasts that include the operation and maintenance of Water and Waste buildings are included in the Water Supply (17), Wastewater (18) and Waste Management and Minimisation (15) budgets and the General AMP Volumes covering these assets. The Property team utilises these budgets to operate and maintain Water and Waste buildings.



5. IMPROVEMENT AND MONITORING PLAN

Our general Asset Management Maturity Improvement Plan is included in the Asset Management Strategy.

General improvements to Property assets are included in the Property General Volume. The specific areas of improvement identified for Water and Waste Building assets are listed in Table 6.

Table 6 Improvements summary

No	Improvement Area	Owner	Start Date	End Date
1	Criticality assessments for property assets have not been carried out. We plan to conduct an assessment in the future to assist renewal, inspection and maintenance planning.	Property Manager	Jul-18	Jun-19
2	Property assets are not componentized in EAM but are detailed on Property team spreadsheets and systems. This is currently under review and we are planning to compile and retrofit componentised information into EAM in the future.	Property Manager	Jul-18	Jun-19



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