

Queenstown Lakes District Council

VALUATION OF WASTEWATER, STORMWATER, WATER SUPPLY, AND FACILITIES ASSETS AS AT 30 JUNE 2024

30 MAY 2024

CONFIDENTIAL



VALUATION OF WASTEWATER, STORMWATER, WATER SUPPLY, AND FACILITIES
ASSETS AS AT 30 JUNE 2024

Queenstown Lakes District Council

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This report ('Report') has been prepared by WSP exclusively for Queenstown Lakes District Council (QLDC) ('Client') in relation to valuation of three waters and facilities assets as at 30 June 2024 ('Purpose') and in accordance with the C-21-195. *QLDC Roading & 3 Waters Infrastructure Valuation Services* dated 1st March 2022. The findings in this Report are based on and are subject to the assumptions specified in the Report. WSP accepts no liability whatsoever for any reliance on or use of this Report, in whole or in part, for any use or purpose other than the Purpose or any use or reliance on the Report by any third party.

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EXECUTIVE SUMMARY

Queenstown Lakes District Council (QLDC) has engaged WSP to prepare a revaluation of wastewater, water supply, stormwater, and facilities assets owned by QLDC as at 30 June 2024 for financial reporting purposes. Assets that were commissioned after 30 June 2023 are managed through a separate process to the revaluation. As a result, they have been excluded from this report and will need to be added by the Council.

WSP has assessed the total gross Optimised Replacement Cost (excluding land) at \$1,850.72M and the Optimised Depreciated Replacement Cost at \$1,272.40M. The Annual Depreciation has been assessed to be \$29.58M. The split between asset groups is tabulated below.

The previous valuation for these four asset types was undertaken in 2023.

The Optimised Depreciated Replacement Cost for wastewater assets has increased by \$6.58M (1.6%). The Optimised Depreciated Replacement Cost for water supply assets has increased by \$12.95M (4.3%). The Optimised Depreciated Replacement Cost for stormwater assets has increased by \$9.69M (2.6%). The Optimised Depreciated Replacement Cost for facilities assets has decreased by \$489.7k (-0.3%).

The components of this change are explained in **Section 5** of this report.

This valuation has been undertaken in accordance with the generally accepted accounting standard PBE IPSAS 17 (Property, Plant and Equipment) and with New Zealand's local authority asset management practice (NZ Infrastructure Asset Valuation/Depreciation Guidelines).

The 2024 valuations are tabulated below along with the change in values since the previous valuations.

Table A: Queenstown Lakes District Council Asset Value Summary as at 30 June 2024

Asset Group	ORC	ODRC	AD
Wastewater	\$595,938,402	\$422,357,280	\$7,986,468
Water Supply	\$434,231,543	\$314,264,108	\$5,921,095
Stormwater	\$543,915,723	\$382,353,655	\$8,236,454
Facilities	\$276,637,132	\$153,429,159	\$7,437,208
Total	\$1,850,722,800	\$1,272,404,203	\$29,581,225

Table B: 2024 and 2023 Valuation Asset Values

Asset Group	2024			2023		
	ORC	ODRC	AD	ORC	ODRC	AD
Wastewater	\$595,938,402	\$422,357,280	\$7,986,468	\$580,425,428	\$415,774,296	\$7,785,518
Water Supply	\$434,231,543	\$314,264,108	\$5,921,095	\$415,014,616	\$301,309,792	\$5,658,104
Stormwater	\$543,915,723	\$382,353,655	\$8,236,454	\$526,560,895	\$372,666,170	\$8,263,502
Facilities	\$276,637,132	\$153,429,159	\$7,437,208	\$269,235,795	\$153,918,902	\$7,289,917
Total	\$1,850,722,800	\$1,272,404,203	\$29,581,225	\$1,791,236,735	\$1,243,669,160	\$28,997,041

Table C: Total Change in Valuation Assets (2023-2024)

Asset Group	Change In Value (\$)			Change In Value (%)		
	ORC	ODRC	AD	ORC	ODRC	AD
Wastewater	\$15,512,975	\$6,582,985	\$200,950	3%	1.6%	3%
Water Supply	\$19,216,927	\$12,954,316	\$262,990	5%	4.3%	5%
Stormwater	\$17,354,827	\$9,687,485	-\$27,048	3%	2.6%	0%
Facilities	\$7,401,337	-\$489,743	\$147,291	3%	-0.3%	2%
Total	\$59,486,066	\$28,735,043	\$584,184	3.3%	2.3%	2.0%

1 INTRODUCTION

1.1 BACKGROUND

WSP was commissioned by Queenstown Lakes District Council (QLDC) to prepare a valuation of water supply, wastewater, stormwater and facilities assets owned by QLDC, as at 30 June 2024 for financial reporting purposes.

1.2 SCOPE

The assets included in this valuation are listed in Table 1-1.

Table 1-1: Queenstown Lakes District Council Assets

Asset Group	Asset	Description
Water Supply	Pipe assets	Reticulation pipes and services pipes.
	Non-Pipe assets	All assets associated with the reticulation networks that are neither pipes nor plant, e.g., valves, meters.
Wastewater	Pipe assets	Reticulation pipes and services pipes.
	Non-Pipe assets	All assets associated with the reticulation networks that are neither pipes nor plant, e.g., valves, manholes.
Stormwater	Pipe assets	Reticulation pipes and services pipes.
	Non-Pipe assets	All assets associated with the reticulation networks that are neither pipes nor plant, e.g., inlets, manholes
Facilities	WS and WW Facilities	All assets associated with water treatment and wastewater plant.

1.3 PURPOSE

The purpose of a financial valuation is for use in financial reporting in accordance with generally accepted accounting standards (PBE IPSAS 17), valuation standards and NZ local authority asset management practice (NZ Infrastructure Asset - Management Manual and Valuation/Depreciation Guidelines).

Local Authorities are required to apply prudent financial management practice including the preparation of long-term financial forecasts. Asset Management Plans provide the framework for technical, economic, and financial inputs relating to infrastructure assets and their impact on long-term financial needs. Asset valuations also provide a critical link between these financial forecasts and the Asset Management Processes.

1.4 ASSET SCHEDULES

QLDC manage their 3 Waters data in a central database called TechOne which is actively maintained and updated. QLDC provided an extract of TechOne on 28 March 2024. The valuation was conducted using Microsoft Excel.

1.5 VALUATION OUTPUTS

Key outputs from this project are:

- Valuation schedules.
- Assessment of economic remaining life (RL) based on age.
- Optimised Replacement Cost (ORC).
- Optimised Depreciated Replacement Cost (ODRC).
- Annual Depreciation (AD).

2 METHODOLOGY

2.1 VALUATION APPROACH

QLDC wastewater, water supply, stormwater, and facilities asset values were assessed as at 30 June 2024. All recorded components have been valued in terms of their replacement and depreciated replacement values. The valuation has been undertaken in accordance with International Accounting Standard PBE IPAS 17 (Property, Plant and Equipment) and with NZ Local Authority Asset Management Practice (NZ Infrastructure Asset Management Manual and Valuation/Depreciation Guidelines). This report presents the methodology and results of the valuation process which includes a comparison with the previous valuation completed for each of the asset groups.

The basic approach has involved:

- Preparation of the valuation schedules from the various sources of information supplied by QLDC.
- Review of asset quantities, materials, and techniques to reflect an optimum (least cost) modern equivalent replacement that offers the same level of service as that currently provided.
- Implementing the inclusion-exclusion methodology to identify the schedule of assets to be valued. This methodology is described in the 2023 valuation report and mentioned briefly in Section 2.2.
- Calculation of Optimised Replacement Cost (ORC) by multiplying asset quantities by appropriate unit construction cost rates and including an allowance for other costs (site establishment and professional fees).
- Prediction and assignment of economic and remaining lives considering the expected life and age of the asset.
- Calculation of Optimised Depreciated Replacement Cost (ODRC) by deducting an allowance for depreciation, considering age, remaining life, residual value, and condition.
- Comparison and reconciliation with the previous valuation of changes for each of the asset groups.

2.2 ASSET SCHEDULES

The asset schedules compiled for this valuation are based on information provided by QLDC.

In 2023 an inclusion-exclusion methodology was developed and approved by QLDC to concretely identify the assets to be valued. This has been carried forward for use in this 2024 valuation. This is because the 2023 methodology produced a robust and repeatable rationale for electing to value each asset, using the ownership, financial status, external status, the commission date fields.

2.3 REPLACEMENT COST

Replacement cost is the cost of rebuilding the existing infrastructure using present day technology and material but maintaining the originally designed level of service. Assuming present-day technology ensures that no value results from the additional cost of outdated and expensive methods

of construction or materials. Maintaining the original level of service ensures that the existing asset is valued, not the currently desirable improved alternative.

The optimised replacement cost (ORC) was calculated by multiplying asset quantities by unit cost rates including the allowance for other direct costs such as professional fees.

$$ORC = Unit\ Rate \times Quantity \times Overhead\ Factor$$

2.4 UNIT COSTS

Unit costs represent brown-field costs which reflect the increased difficulties and constraints of undertaking construction, maintenance, and renewal work simultaneously with continued operation of the infrastructure. Operational constraints include access, delivery, safety, security, material handling and storage, traffic control and hours available for construction work.

Historic costs have been updated to 30 June 2024 values using a variety of cost indices. For all assets, an overall indicator of sector cost escalation was developed by using different capital goods indices.

The Capital Goods Price Index (CGPI) provides a measure of the price level for the physical assets. To measure the change in capital costs, the Statistics New Zealand (Stats NZ) Capital Goods Price Indexes are analysed. We use a weighted average of these indices to represent the typical cost proportions of a three waters project for Reticulation and Facilities.

2024 Price adjustments are presented in Table 2-1.

Table 2-1: Price Adjustments

Asset Group	2024 Price Adjustments
Reticulation	0.00%
Facilities	0.87%

When accounting for the correction factor from 2023 and the current forecast through to June 2024 we have observed a minor decrease in value for Reticulation assets. As a result, we have revised the forecast to remain unchanged at 0% for the 2023/24 financial year. This decision considers the decrease as not material and that the June 2024 quarter is being forecasted for this valuation.

In line with previous valuations, WSP has developed composite indices for reticulation and facilities based on Capital, Labour, and Producers price indices. The 2022 and 2023 weightings have been kept unchanged for consistency.

Table 2-2: Reticulation composite indices weightings

Composite	Series Name	Description	Weight
Reticulation	CEPQ.S611031B	Systems for water and sewerage	50.50%
Reticulation	CEPQ.S611031D	Other civil construction	12.60%
Reticulation	LCIQ.SG53E9	Labour Cost Index - Construction Industry	27.00%
Reticulation	LCIQ.SG53O9	Labour Cost Index - Public Admin	4.50%
Reticulation	PPIQ.SQNC61300	Producers Price Index - Civil engineering services	5.40%
Total			100%

Table 2-3: Facilities composite indices weightings

Composite	Series Name	Description	Weight
Facilities	CEPQ.S611066A	General purpose plant and machinery	31.00%
Facilities	CEPQ.S611021C	Hospitals, nursing homes, and other health buildings	6.20%
Facilities	CEPQ.S611031B	Systems for water and sewerage	12.40%
Facilities	CEPQ.S611031E	Energy generation, transmission, and distribution works	6.20%
Facilities	CEPQ.S611031D	Other civil construction	6.20%
Facilities	LCIQ.SG53E9	Labour Cost Index - Construction Industry	26.50%
Facilities	LCIQ.SG53O9	Labour Cost Index - Public Admin	4.40%
Facilities	PPIQ.SQNC61300	Producers Price Index - Civil engineering services	7.10%
Total			100%

The June 2024 composite indices were forecasted by using a Holt Winters Exponential Smoothing methodology. This was undertaken to estimate price increases for the valuation to prevent short term fluctuations from having undue effects on these long-term, specialised assets. A correction was applied to account for both forecasting uncertainty in the 2023 valuation and updates to the constituent series made by Stats NZ. This correction accounted for the fact that 2023 valuation's index was over forecasted. Since June 2023, the indices have plateaued and not continued to rise at the same pace as quarters prior to June 2023. This is shown in **Table 2-4** below.

Table 2-4: Final indices with June 2023 forecasts

Composite Index	Jun'23	Jun'24 (Forecast)	Index Jun'23 to Jun'24	Index with correction applied
Reticulation	1055.8	1088.99	3.14%	0.00%
Facilities	1058.6	1092.06	3.16%	0.87%

2.5 ON-COST

Unit cost rates include actual purchase/construction costs only. These rates are increased by an on-cost allocation that covers both external consultants' fees and Council's own costs. External consultant fees generally range between 5% and 15%, depending on the degree of technical difficulty associated with the asset.

An allowance for Council's own costs should also be capitalised into the value on acquiring or constructing an asset. All costs that are directly attributable to bringing an asset into working condition for its intended use should be included in its measurement. These attributable costs include labour costs of the Council's own employees arising directly from capital works activity (this maybe subcontracted out). It does not include time and resources spent on non-capital maintenance and management of the asset. The accepted method of quantifying an agency's costs is to assess the incremental costs that would have been avoided only if the assets had not been constructed or acquired.

These additional costs have been allowed by adding a percentage on top of the construction costs for water supply, wastewater, stormwater, and facilities, as shown in **Table 2-5**.

Table 2-5: On-cost

Asset Group	2024 On-cost
Reticulation	26.20%
Facilities	25.90%

Over the past few years, WSP's analysis has revealed that on-costs have been historically understated. Additionally, changes in industry practices, specifically related to health, safety, quality assurance, and environmental issues, have significantly increased these costs.

2.6 OPTIMISATION AND OBSOLESCENCE

Optimisation, in a valuation context, relates to provision of the same utility at a minimum overall cost. This involves adjustment to eliminate any excess capacity (surplus or redundant assets), over-design, technological obsolescence, and/or pricing of a more efficient solution. Pipe assets were optimised by using the modern equivalent pipe material.

2.7 ECONOMIC AND REMAINING LIFE

The economic life of an asset is the period beyond which it is economically worthwhile to replace rather than to continue to repair or maintain. The economic life varies for each asset. These have been calculated in accordance with the Institute of Public Works Engineering Australasia (IPWEA) guidelines and then further modified if local knowledge and experience suggests this is appropriate.

2.8 RESIDUAL VALUE

We have not seen evidence where residual values can be applied to these assets, therefore no residual values have been adopted within this valuation.

2.9 METHOD OF DEPRECIATION

The basic value of an asset reduces in accordance with the wearing out or consumption of benefits over its life arising from use, the passage of time, or obsolescence. This reduced value is called the depreciated value and has been calculated as the depreciable component of the replacement cost proportioned by the ratio of remaining useful life (RUL) to total useful life (TUL) on a straight-line basis. This method provides a reasonable basis for the 'return of capital' over the economic life of the asset. Depreciated replacement cost is given by:

$$ODRC = \frac{RUL}{TUL} \times ORC$$

Where:

- ODRC = Optimised Depreciated Replacement Cost
- RC = Replacement Cost
- RUL = Remaining Useful Life
- TUL = Total Useful life (Age + Remaining useful life)

2.10 ANNUAL DEPRECIATION

The annual depreciation (AD) is calculated by dividing the depreciable portion of the optimised replacement cost of an asset by its total useful life. The Annual Depreciation is calculated by:

$$AD = \frac{ORC}{TUL}$$

If the network is being maintained at a stable level of service, the long run average renewal expenditure should approximate the annual depreciation of the network.

It should be noted that depreciation is not a proxy for the amount needed to fund long-term asset requirements. Accounting for the past consumption is not the same as providing for future consumption. These two purposes differ and need to be considered separately.

2.11 CLIENT INVOLVEMENT

WSP has maintained a regular on-going communication with QLDC staff throughout the project to incorporate their local knowledge and experience.

3 VALUATION SUMMARY

3.1 REPLACEMENT COST

The information source and basis for the Replacement Values is summarised as follows in Table 3-1.

Table 3-1: Queenstown Lakes District Council Assets- Valuation Basis

Asset Group	Asset	Description
Water Supply	Pipe assets	Valued on a \$/m basis. This rate varies per diameter. Straight-line depreciation.
	Non-Pipe assets	Valued on a per unit basis. This rate varies per diameter or units. Straight-line depreciation.
Wastewater	Pipe assets	Valued on a \$/m basis. This rate varies per diameter. Straight-line depreciation.
	Non-Pipe assets	Valued on a per unit basis. This rate varies per diameter or units. Straight-line depreciation.
Stormwater	Pipe assets	Valued on a \$/m basis. This rate varies per diameter. Straight-line depreciation.
	Non-Pipe assets	Valued on a per unit basis. This rate varies per diameter or units. Straight-line depreciation.
Facilities	Facilities	Valued on a per unit basis. This rate varies per asset. Straight-line depreciation.

3.2 ASSET BASE LIVES

A breakdown in lives for each asset is provided in the valuation schedules.

3.3 CONDITION RATINGS

No adjustments for condition ratings were made.

3.4 DEPRECIATION

Depreciation has been calculated on a straight-line basis. Where the date of construction is known, the age is used directly to calculate remaining life based on the average lives of each asset type. Where the date of construction is unknown, an assumption is made about the average proportion an asset is through its life cycle.

4 VALUATION SUMMARY

4.1 VALUATION RESULTS

WSP has assessed the total gross Optimised Replacement Cost (excluding land) at \$1.851B and the Optimised Depreciated Replacement Cost at \$1.272B. The Annual Depreciation has been assessed to be \$29.581M.

Table 4-1: Queenstown Lakes District Council Asset Valuation 2024 Summary by Asset Group

Asset Group	ORC	ODRC	AD
Wastewater	\$595,938,402	\$422,357,280	\$7,986,468
Water Supply	\$434,231,543	\$314,264,108	\$5,921,095
Stormwater	\$543,915,723	\$382,353,655	\$8,236,454
Facilities	\$276,637,132	\$153,429,159	\$7,437,208
Total	\$1,850,722,800	\$1,272,404,203	\$29,581,225

Table 4-2: Queenstown Lakes District Council Wastewater Asset Valuation 2024 Summary

Category		ORC	ODRC	AD
Wastewater	Mains	\$507,018,634	\$358,463,040	\$6,706,256
	Valves	\$5,890,276	\$3,192,723	\$284,023
	Manholes	\$80,900,621	\$58,810,412	\$958,911
	Connections	\$2,074,833	\$1,866,789	\$34,575
	Meters	\$54,038	\$24,317	\$2,702
	Total	\$595,938,402	\$422,357,280	\$7,986,468

Table 4-3: Queenstown Lakes District Council Water Supply Asset Valuation 2024 Summary

Category		ORC	ODRC	AD
Water Supply	Mains	\$390,110,206	\$286,807,044	\$4,995,038
	Valves	\$26,536,785	\$16,003,442	\$579,941
	Hydrants	\$14,195,932	\$9,681,296	\$204,826
	Meters	\$1,897,818	\$1,282,854	\$81,648
	Backflow Device	\$1,490,803	\$489,471	\$59,641
	Total	\$434,231,543	\$314,264,108	\$5,921,095

Table 4-4: Queenstown Lakes District Council Stormwater Asset Valuation 2024 Summary

Category		ORC	ODRC	AD
Stormwater	Valves	\$185,539	\$35,401	\$8,887
	Manholes	\$63,046,084	\$43,523,626	\$720,412
	Pipe	\$444,863,375	\$321,035,222	\$7,038,630
	Culverts	\$19,160,939	\$10,786,278	\$226,029
	End Structure	\$14,731,781	\$5,992,268	\$213,545
	Stormwater Pit	\$46,385	\$43,138	\$773
	WSUD Area	\$1,881,621	\$937,724	\$28,178
	Total	\$543,915,723	\$382,353,655	\$8,236,454

Table 4-5: Queenstown Lakes District Council Facilities Asset Valuation 2024 Summary

Category		ORC	ODRC	AD
Facilities	QUEENTWN	\$151,856,395	\$89,040,078	\$3,613,296
	WANAKA	\$59,617,353	\$24,502,236	\$1,961,219
	ARRWTWN	\$9,021,268	\$4,795,023	\$246,132
	ARTHPT	\$4,993,404	\$2,768,374	\$132,863
	LKHAYES	\$14,127,031	\$6,168,015	\$460,391
	CARDRONA	\$18,850,090	\$17,032,574	\$498,931
	LKHAWEA	\$9,120,868	\$4,168,906	\$264,594
	GLENORCH	\$1,462,782	\$559,713	\$43,942
	LUGGATE	\$4,963,620	\$2,569,096	\$159,416
	SHTVRCTY	\$2,624,320	\$1,825,143	\$56,425
	Sub Total	\$276,637,132	\$153,429,159	\$7,437,208

4.2 CONFIDENCE RATINGS

Confidence ratings were assigned to the source data and unit cost rates and to other items as appropriate. The confidence ratings used are summarised in Table 4-6 below.

Table 4-6: Confidence Ratings

Grade	Label	Description	Accuracy
A	Highly Reliable	Data based on sound records, procedures, investigation, and analysis which is properly documented and recognised as the best method of assessment.	± 5-10%
B	Reliable	Data based on sound records, procedures, investigation, and analysis which is properly documented but has minor short comings, for example the data is old, some documentation is missing, and reliance is placed on unconfirmed reports or some extrapolation.	± 10-20%
C	Uncertain	Data based on sound records, procedures, investigation, and analysis which is incomplete or unsupported, or extrapolation from a limited sample for which Grade A or B data is available.	± 20-30%
D	Very Uncertain	Data based on unconfirmed verbal reports and/or cursory inspection and analysis.	± 30-40%
E	Unknown	Based on a best guess from an experienced person.	± 50-60%

4.3 CONFIDENCE LEVELS

Based on the other data used for this valuation, an overall confidence rating of B-C (±20%) has been assigned to the 2024 valuation. The breakdown of this is set out in Table 4-7.

Table 4-7: Assessment of Confidence Levels

Asset Group	Asset	Quantity	Unit Cost	Life Expectancy	ODRC
Water Supply	Pipe Reticulation assets	B	B-C	B	B-C
	Non-Pipe assets	B	B-C	B	B-C
Wastewater	Pipe Reticulation assets	B	B-C	B	B-C
	Non-Pipe assets	B	B-C	B	B-C
Stormwater	Pipe Reticulation assets	B	B-C	B	B-C
	Non-Pipe assets	B	B-C	B	B-C
Facilities	WS and WW Facilities	B	C	B-C	B-C

5 CHANGE IN VALUATION

Comparison of the 2024 valuation with the previous valuation is shown in **Table 5-1** for Optimised Replacement Cost, Optimised Depreciated Replacement Cost, and Annual Depreciation. The total change and percentage change for each asset group is shown in **Table 5-2**. The ODRC has increased by 1.6%, 4.3%, and 2.6% for wastewater, water supply, and stormwater, respectively. Facilities ODRC has decreased by 0.3%. Facilities ODRC has decreased by 0.3%.

Table 5-1: 2024 and 2023 Valuation Asset Values

Asset Group	2024			2023		
	ORC	ODRC	AD	ORC	ODRC	AD
Wastewater	\$595,938,402	\$422,357,280	\$7,986,468	\$580,425,428	\$415,774,296	\$7,785,518
Water Supply	\$434,231,543	\$314,264,108	\$5,921,095	\$415,014,616	\$301,309,792	\$5,658,104
Stormwater	\$543,915,723	\$382,353,655	\$8,236,454	\$526,560,895	\$372,666,170	\$8,263,502
Facilities	\$276,637,132	\$153,429,159	\$7,437,208	\$269,235,795	\$153,918,902	\$7,289,917
Total	\$1,850,722,800	\$1,272,404,203	\$29,581,225	\$1,791,236,735	\$1,243,669,160	\$28,997,041

Table 5-2: Total Change in Valuation Assets (2023-2024)

Asset Group	Change In Value (\$)			Change In Value (%)		
	ORC	ODRC	AD	ORC	ODRC	AD
Wastewater	\$15,512,975	\$6,582,985	\$200,950	3%	1.6%	3%
Water Supply	\$19,216,927	\$12,954,316	\$262,990	5%	4.3%	5%
Stormwater	\$17,354,827	\$9,687,485	-\$27,048	3%	2.6%	0%
Facilities	\$7,401,337	-\$489,743	\$147,291	3%	-0.3%	2%
Total	\$59,486,066	\$28,735,043	\$584,184	3.3%	2.3%	2.0%

Table 5-3: Detailed Change in Valuation of Wastewater Assets (2023-2024)

Asset Group		2024			2023			Change In Value (\$)			Change In Value (%)		
		ORC	ODRC	AD	ORC	ODRC	AD	ORC	ODRC	AD	ORC	ODRC	AD
Wastewater	Mains	\$507,018,634	\$358,463,040	\$6,706,256	\$493,819,899	\$352,879,427	\$6,552,376	\$13,198,736	\$5,583,613	\$153,880	3%	2%	2%
	Valves	\$5,890,276	\$3,192,723	\$284,023	\$5,298,974	\$2,896,743	\$257,214	\$591,303	\$295,980	\$26,810	11%	10%	10%
	Manholes	\$80,900,621	\$58,810,412	\$958,911	\$79,177,686	\$58,069,748	\$938,651	\$1,722,936	\$740,664	\$20,260	2%	1%	2%
	Connections	\$2,074,833	\$1,866,789	\$34,575	\$2,074,833	\$1,901,358	\$34,575	\$0	-\$34,569	\$0	0%	-2%	0%
	Meters	\$54,038	\$24,317	\$2,702	\$54,038	\$27,019	\$2,702	\$0	-\$2,702	\$0	0%	-10%	0%
	Sub Total	\$595,938,402	\$422,357,280	\$7,986,468	\$580,425,428	\$415,774,296	\$7,785,518	\$15,512,975	\$6,582,985	\$200,950	3%	2%	3%
Water Supply	Mains	\$390,110,206	\$286,807,044	\$4,995,038	\$372,827,740	\$274,863,483	\$4,776,219	\$17,282,467	\$11,943,561	\$218,819	5%	4%	5%
	Valves	\$26,536,785	\$16,003,442	\$579,941	\$25,682,201	\$15,700,588	\$567,939	\$854,584	\$302,854	\$12,002	3%	2%	2%
	Hydrants	\$14,195,932	\$9,681,296	\$204,826	\$13,836,790	\$9,531,868	\$199,764	\$359,141	\$149,428	\$5,062	3%	2%	3%
	Meters	\$1,897,818	\$1,282,854	\$81,648	\$1,210,584	\$703,154	\$55,233	\$687,234	\$579,701	\$26,415	57%	82%	48%
	Backflow Device	\$1,490,803	\$489,471	\$59,641	\$1,457,301	\$510,700	\$58,949	\$33,501	-\$21,229	\$692	2%	-4%	1%
	Sub Total	\$434,231,543	\$314,264,108	\$5,921,095	\$415,014,616	\$301,309,792	\$5,658,104	\$19,216,927	\$12,954,316	\$262,990	5%	4%	5%
Stormwater	Valves	\$185,539	\$35,401	\$8,887	\$185,539	\$44,215	\$8,888	\$0	-\$8,814	-\$1	0%	-20%	0%
	Manholes	\$63,046,084	\$43,523,626	\$720,412	\$60,411,412	\$41,585,920	\$689,918	\$2,634,672	\$1,937,706	\$30,494	4%	5%	4%
	Pipe	\$444,863,375	\$321,035,222	\$7,038,630	\$430,839,585	\$313,096,045	\$7,101,688	\$14,023,789	\$7,939,177	-\$63,058	3%	3%	-1%
	Culverts	\$19,160,939	\$10,786,278	\$226,029	\$19,042,659	\$10,867,212	\$225,075	\$118,280	-\$80,934	\$954	1%	-1%	0%
	End Structure	\$14,731,781	\$5,992,268	\$213,545	\$14,657,560	\$6,084,744	\$213,060	\$74,221	-\$92,476	\$485	1%	-2%	0%
	Stormwater Pit	\$46,385	\$43,138	\$773	\$46,385	\$43,911	\$773	\$0	-\$773	\$0	0%	-2%	0%
	WSUD Area	\$1,881,621	\$937,724	\$28,178	\$1,377,755	\$944,124	\$24,101	\$503,866	-\$6,400	\$4,077	37%	-1%	17%
	Sub Total	\$543,915,723	\$382,353,655	\$8,236,454	\$526,560,895	\$372,666,170	\$8,263,502	\$17,354,827	\$9,687,485	-\$27,048	3%	3%	0%
Facilities	QUEENTWN	\$151,856,395	\$89,040,078	\$3,613,296	\$148,401,206	\$89,386,141	\$3,554,563	\$3,455,189	-\$346,063	\$58,734	2%	0%	2%
	WANAKA	\$59,617,353	\$24,502,236	\$1,961,219	\$56,449,703	\$23,502,120	\$1,890,421	\$3,167,650	\$1,000,116	\$70,798	6%	4%	4%
	ARRWTWN	\$9,021,268	\$4,795,023	\$246,132	\$8,941,460	\$4,973,257	\$244,715	\$79,808	-\$178,234	\$1,417	1%	-4%	1%
	ARTHPT	\$4,993,404	\$2,768,374	\$132,863	\$4,931,432	\$2,846,577	\$131,594	\$61,972	-\$78,203	\$1,269	1%	-3%	1%
	LKHAYES	\$14,127,031	\$6,168,015	\$460,391	\$13,992,925	\$6,539,822	\$457,198	\$134,106	-\$371,807	\$3,193	1%	-6%	1%
	CARDRONA	\$18,850,090	\$17,032,574	\$498,931	\$18,687,509	\$17,372,934	\$495,015	\$162,582	-\$340,360	\$3,916	1%	-2%	1%
	LKHAWEA	\$9,120,868	\$4,168,906	\$264,594	\$8,872,633	\$4,176,931	\$257,838	\$248,235	-\$8,025	\$6,756	3%	0%	3%
	GLENORCH	\$1,462,782	\$559,713	\$43,942	\$1,450,166	\$587,146	\$43,945	\$12,616	-\$27,433	-\$3	1%	-5%	0%
	LUGGATE	\$4,963,620	\$2,569,096	\$159,416	\$4,907,077	\$2,668,634	\$158,690	\$56,543	-\$99,538	\$725	1%	-4%	0%
	SHTVRCTY	\$2,624,320	\$1,825,143	\$56,425	\$2,601,685	\$1,865,339	\$55,938	\$22,635	-\$40,196	\$487	1%	-2%	1%
	Sub Total	\$276,637,132	\$153,429,159	\$7,437,208	\$269,235,795	\$153,918,902	\$7,289,917	\$7,401,337	-\$489,743	\$147,291	3%	0%	2%

The general components of change are:

- General depreciation of one year.
- General increase in construction cost between 2023 and 2024 for reticulation (0.00%) and facilities (0.87%) assets.
- Change in quantities of assets (see **Table 5-4** below).

5.1 ASSET QUANTITIES

Table 5-4: Change in Asset Quantities

Asset Group	Asset Type	2024	2023	Change (quantum)	Change (%)
Wastewater	Pipe	626,609	608,096	18,513	3.04%
	Non-Pipe	9,089	8,856	233	2.63%
Water Supply	Pipe	619,342	600,438	18,904	3.15%
	Non-Pipe	27,478	26,022	1,456	5.60%
Stormwater	Pipe	439,451	423,113	16,338	3.86%
	Non-Pipe	8,648	8,292	356	4.29%
Facilities	Facilities	5,519	5,443	76	1.40%

5.2 REASON OF CHANGES FOR WASTEWATER

Table 5-5: Breakdown of Changes in Wastewater

Reason for Change	Wastewater		
	ORC	ODRC	AD
2023 Value	\$580,425,428	\$415,774,296	\$7,785,518
Additions & Deletions	\$15,512,975	\$14,406,078	\$204,263
One Year's Depreciation	\$0	-\$7,823,093	-\$3,313
Market Movement	\$0	\$0	\$0
2024 Value	\$595,938,402	\$422,357,280	\$7,986,468

The main changes to the wastewater assets are as follows:

\$14.4M of additions, with a commission date between 1 July 2022 and 30 June 2023.

- One year's depreciation reducing ODRC by \$7.8M.
- No increase in the construction cost through indexing (see **Section 2.4**).

5.3 REASON OF CHANGES FOR WATER SUPPLY

Table 5-6: Breakdown of Changes in Water Supply

Reason for Change	Water Supply		
	ORC	ODRC	AD
2023 Value	\$415,014,616	\$301,309,792	\$5,658,104
Additions & Deletions	\$19,216,927	\$18,789,577	\$264,079
One Year's Depreciation	\$0	-\$5,835,261	-\$1,088
Market Movement	\$0	\$0	\$0
2024 Value	\$434,231,543	\$314,264,108	\$5,921,095

The main changes to the water supply assets are as follows:

- \$18M of additions, with a commission date between 1 July 2022 and 30 June 2023.
- One year's depreciation reducing ODRC by \$5.2M.
- The quantum of smart metres has increased across QLDC's network. This is due to smart metre installations across the water supply network.
- No increase in the construction cost through indexing (see **Section 2.4**).

5.4 REASON OF CHANGES FOR STORMWATER

Table 5-7: Breakdown of Changes in Stormwater

Reason for Change	Stormwater		
	ORC	ODRC	AD
2023 Value	\$526,560,895	\$372,666,170	\$8,263,502
Additions & Deletions	\$17,354,827	\$16,545,782	\$214,492
One Year's Depreciation	\$0	-\$6,858,297	-\$241,540
Market Movement	\$0	\$0	\$0
2024 Value	\$543,915,723	\$382,353,655	\$8,236,454

The main changes to the stormwater assets are as follows:

- \$16.5M of additions, with a commission date between 1 July 2022 and 30 June 2023.
- One year's depreciation reducing ODRC by \$6.9M.
- No increase in the construction cost through indexing (see **Section 2.4**).

5.5 REASON OF CHANGES FOR FACILITIES

Table 5-8: Breakdown of Changes in Facilities

Reason for Change	Facilities		
	ORC	ODRC	AD
2023 Value	\$269,235,795	\$153,918,902	\$7,289,917
Additions & Deletions	\$5,015,357	\$4,930,060	\$107,021
One Year's Depreciation	\$0	-\$6,743,123	-\$23,875
Market Movement	\$2,385,980	\$1,323,320	\$64,146
2024 Value	\$276,637,132	\$153,429,159	\$7,437,208

The main changes to the facilities assets are as follows:

- The general increase in construction cost of 0.87% increasing ODRC by \$1.3M (see **Section 2.4**).
- \$4.9M of additions, with a commission date between 1 July 2022 and 30 June 2023.
- One year's depreciation reducing ODRC by \$6.7M.

6 RECOMMENDATIONS

The 2023 valuation process required WSP to develop an inclusion-exclusion methodology, confirmed by QLDC, given that in previous valuations there was a clear discrepancy between valued assets, and those included in QLDC's TechOne Three Waters asset database.

This inclusion-exclusion methodology identified assets that were not valued historically but should have been and has removed some assets from the set of those valued.

This 2024 valuation has followed the same methodology and principles as the 2023 valuation. To aid consistency and repeatability of the 3W valuation moving forward our recommendations involve tidying up the TechOne database with some key tasks, these include:

1. Update the booking data with the 2024 values and remove the financial values against the assets that are no longer to be valued. This will enable easy reference and reconciliation in future valuations.
2. Retain the previous valuation's unit rates within the booking data. This will enable easy reference and reconciliation in future valuations.
3. Dummy lateral assets exist for water supply and wastewater assets in TechOne. These records were initially added to account for assets missing from the dataset and derived from the number of properties in the Queenstown Lakes region. However, due to their significant value and quantity, it is advisable to break them out as separate records (by ward or similar) within TechOne. This separation will enable better management and adjustment of the quantum of these assets over time, leading to a more accurate representation of the overall asset value.
4. Ahead of the next valuation, undertake exercises to determine:
 - a. An updated and standardised set of useful lives for each asset type and material combination, rather than preferentially using the useful lives from the prior valuation.
 - b. whether the acquisition dates for assets new to the books are being recorded appropriately and that the original cost can be associated to each record.
5. We suggest that QLDC implements a closeout process after the valuation between Finance and Property & Infrastructure (P&I) teams where both import the valuation data that they separately control, and then a brief validation exercise is undertaken by the valuers or a third party to ensure that TechOne has been updated appropriately.

7 LIMITATIONS

This report ('Report') has been prepared by WSP New Zealand Limited ('WSP') exclusively for Queenstown Lakes District Council (QLDC) ('Client') in relation to valuation of three waters and facilities assets as at 30 June 2024 ('Purpose') and in accordance with the C-21-195. *QLDC Roading & 3 Waters Infrastructure Valuation Services* dated 1st March 2022 ('Agreement'). The findings in this Report are based on and are subject to the assumptions specified in the Report. WSP accepts no liability whatsoever for any use or reliance on this Report, in whole or in part, for any purpose other than the Purpose or for any use or reliance on this Report by any third party.

In preparing this Report, WSP has relied upon data, surveys, analyses, designs, plans, and other information ('Client Data') provided by or on behalf of the Client. Except as otherwise stated in this Report, WSP has not verified the accuracy or completeness of the Client Data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in this Report are based in whole or part on the Client Data, those conclusions are contingent upon the accuracy and completeness of the Client Data. WSP will not be liable for any incorrect conclusions or findings in the Report should any Client Data be incorrect or have been concealed, withheld, misrepresented, or otherwise not fully disclosed to WSP.

8 APPENDIX A: VALUATION SUMMARIES BY WARD AND ASSET GROUP

8.1 WASTEWATER SUMMARY BY WARD

Table 8-1: Wastewater Reticulation Summary by Ward

Asset Ward	2024		
	ORC	ODRC	AD
ALBRTTWN	\$1,642,242	\$1,171,299	\$26,777
ARRWTWN	\$29,139,972	\$15,739,816	\$404,355
ARTHPT	\$9,964,037	\$7,311,998	\$128,027
CARDRONA	\$2,303,047	\$2,129,165	\$29,838
LKHAWEA	\$24,905,655	\$19,621,039	\$315,239
LKHAYES	\$39,266,025	\$29,875,987	\$498,104
LUGGATE	\$4,416,863	\$3,358,558	\$53,584
NOSCHEME	\$433,631	\$309,363	\$5,244
QUEENTWN	\$191,695,867	\$125,647,078	\$2,606,671
SHTVRCTY	\$13,003,172	\$11,260,161	\$162,191
WANAKA	\$190,248,125	\$142,038,576	\$2,476,227
Totals	\$507,018,634	\$358,463,040	\$6,706,256

Table 8-2: Wastewater Points Summary by Ward

Asset Ward	2024		
	ORC	ODRC	AD
ARRWTWN	\$5,224,558	\$3,207,289	\$70,856
ARTHPT	\$2,238,523	\$1,638,488	\$28,560
CARDRONA	\$511,137	\$418,658	\$14,290
LKHAWEA	\$4,292,483	\$3,260,313	\$55,305
LKHAYES	\$5,543,844	\$4,219,360	\$82,371
LUGGATE	\$823,663	\$648,022	\$15,516
NOSCHEME	\$38,075	\$31,690	\$470
QUEENTWN	\$35,545,126	\$24,452,673	\$504,815
SHTVRCTY	\$2,954,545	\$2,624,041	\$37,537
WANAKA	\$31,747,815	\$23,393,708	\$470,492
Totals	\$88,919,768	\$63,894,241	\$1,280,212

8.2 WATER SUPPLY SUMMARY BY WARD

Table 8-3: Water Supply Reticulation Summary by Ward

Asset Ward	2024		
	ORC	ODRC	AD
ARRWTWN	\$19,715,413	\$11,126,825	\$266,989
ARTHPT	\$7,615,416	\$5,699,516	\$96,323
CARDRONA	\$57,688	\$52,640	\$721
GLENORCH	\$5,157,028	\$3,751,283	\$65,669
LKHAWEA	\$22,122,212	\$16,627,054	\$265,391
LKHAYES	\$36,488,274	\$28,884,661	\$462,666
LUGGATE	\$4,118,446	\$2,747,166	\$48,554
NOSHEME	\$157,039	\$118,840	\$2,122
QUEENTWN	\$135,915,014	\$94,071,361	\$1,762,548
SHTVRCTY	\$11,821,454	\$10,543,358	\$147,782
WANAKA	\$146,942,224	\$113,184,339	\$1,876,274
Totals	\$390,110,206	\$286,807,044	\$4,995,038

Table 8-4: Water Supply Point Summary by Ward

Asset Ward	2024		
	ORC	ODRC	AD
ARRWTWN	\$2,783,625	\$1,454,213	\$49,141
ARTHPT	\$926,591	\$618,938	\$19,423
CARDRONA	\$3,512	\$1,541	\$126
GLENORCH	\$760,347	\$527,398	\$14,745
LKHAWEA	\$3,259,755	\$2,361,402	\$67,515
LKHAYES	\$3,509,623	\$2,434,437	\$70,897
LUGGATE	\$949,784	\$624,860	\$27,704
QUEENTWN	\$13,808,974	\$8,232,153	\$275,601
SHTVRCTY	\$1,624,067	\$1,024,295	\$67,935
WANAKA	\$16,495,058	\$10,177,828	\$332,969
Totals	\$44,121,337	\$27,457,064	\$926,056

8.3 STORMWATER SUMMARY BY WARD

Table 8-5: Stormwater Reticulation Summary by Ward

Asset Ward	2024		
	ORC	ODRC	AD
ARRWTWN	\$20,055,217	\$13,667,829	\$246,541
ARTHPT	\$7,382,770	\$5,732,136	\$95,065
CARDRONA	\$3,836,547	\$3,261,106	\$46,223
FRNKFLAT	\$16,201,155	\$14,631,084	\$211,118
GLENORCH	\$1,886,821	\$1,376,670	\$23,353
LKHAWEA	\$13,224,323	\$10,002,442	\$160,054
LKHAYES	\$36,724,748	\$27,144,497	\$819,896
LUGGATE	\$3,865,881	\$2,379,474	\$51,648
QUEENTWN	\$159,297,591	\$106,478,812	\$2,726,915
SHTVRCTY	\$24,474,831	\$21,570,604	\$332,145
WANAKA	\$177,074,428	\$125,576,845	\$2,551,700
Totals	\$464,024,314	\$331,821,499	\$7,264,659

Table 8-6: Stormwater Points Summary by Ward

Asset Ward	2024		
	ORC	ODRC	AD
ALBRTTWN	\$62,983	\$52,906	\$1,260
ARRWTWN	\$3,752,949	\$2,250,116	\$48,284
ARTHPT	\$2,020,969	\$1,255,754	\$25,816
CARDRONA	\$667,940	\$440,991	\$12,286
FRNKFLAT	\$1,000,505	\$904,715	\$12,438
GLENORCH	\$942,036	\$611,747	\$13,863
LKHAWEA	\$5,228,687	\$3,191,513	\$58,786
LKHAYES	\$4,816,437	\$3,579,348	\$65,098
LUGGATE	\$720,793	\$532,959	\$8,975
QUEENTWN	\$29,129,893	\$16,033,149	\$331,749
SHTVRCTY	\$2,838,744	\$2,506,170	\$35,682
WANAKA	\$28,709,474	\$19,172,788	\$357,559
Totals	\$79,891,409	\$50,532,156	\$971,795

8.4 FACILITIES SUMMARY BY WARD

Table 8-7: Water Supply and Wastewater Facilities Summary by Ward

Asset Ward	2024		
	ORC	ODRC	AD
QUEENTWN	\$151,856,395	\$89,040,078	\$3,613,296
WANAKA	\$59,617,353	\$24,502,236	\$1,961,219
ARRWTWN	\$9,021,268	\$4,795,023	\$246,132
ARTHPT	\$4,993,404	\$2,768,374	\$132,863
LKHAYES	\$14,127,031	\$6,168,015	\$460,391
CARDRONA	\$18,850,090	\$17,032,574	\$498,931
LKHAWEA	\$9,120,868	\$4,168,906	\$264,594
GLENORCH	\$1,462,782	\$559,713	\$43,942
LUGGATE	\$4,963,620	\$2,569,096	\$159,416
SHTVRCTY	\$2,624,320	\$1,825,143	\$56,425
Total	\$276,637,132	\$153,429,159	\$7,437,208

Table 8-8: Water Supply Facilities Summary by Ward

Asset Ward	2024		
	ORC	ODRC	AD
QUEENTWN	\$48,661,343	\$23,465,752	\$1,147,769
WANAKA	\$24,732,753	\$12,959,350	\$630,442
ARRWTWN	\$6,093,282	\$3,828,233	\$156,922
ARTHPT	\$3,482,970	\$2,281,419	\$75,828
LKHAYES	\$7,420,203	\$3,430,544	\$225,877
LKHAWEA	\$5,485,181	\$2,970,263	\$138,528
GLENORCH	\$1,462,782	\$559,713	\$43,942
LUGGATE	\$1,466,712	\$723,439	\$43,976
SHTVRCTY	\$2,415,319	\$1,721,043	\$48,901
Total	\$101,220,546	\$51,939,755	\$2,512,182

Table 8-9: Wastewater Facilities Summary by Ward

Asset Ward	2024		
	ORC	ODRC	AD
QUEENTWN	\$103,195,052	\$65,574,327	\$2,465,528
WANAKA	\$34,884,600	\$11,542,886	\$1,330,778
ARRWTWN	\$2,927,985	\$966,791	\$89,210
ARTHPT	\$1,510,434	\$486,955	\$57,036
LKHAYES	\$6,706,828	\$2,737,471	\$234,515
CARDRONA	\$18,850,090	\$17,032,574	\$498,931
LKHAWEA	\$3,635,687	\$1,198,643	\$126,066
LUGGATE	\$3,496,908	\$1,845,658	\$115,440
SHTVRCTY	\$209,001	\$104,100	\$7,524
Total	\$175,416,586	\$101,489,404	\$4,925,026

9 APPENDIX B: VALUATION ASSUMPTIONS & UNIT RATES

9.1 WASTEWATER

Table 9-1: Wastewater Reticulation Unit Rates

Pipe Diameter (mm)	Unit Rate (Excl. On-Cost)	Quantity (m)
25	\$231	1,855
50	\$225	9,545
75	\$279	11,606
100	\$294	96,086
125	\$487	14,552
150	\$503	340,865
200	\$601	18,515
250	\$752	26,115
300	\$836	31,943
375	\$989	15,666
400	\$1,105	5,814
450	\$1,194	9,293
500	\$1,343	7,940
600	\$1,676	14,537
675	\$1,850	4,678
750	\$2,196	11
800	\$2,320	584
1800	\$7,580	30
Total		609,633

Note that this does not include the 16,976m of lump sum 'dummy' laterals.

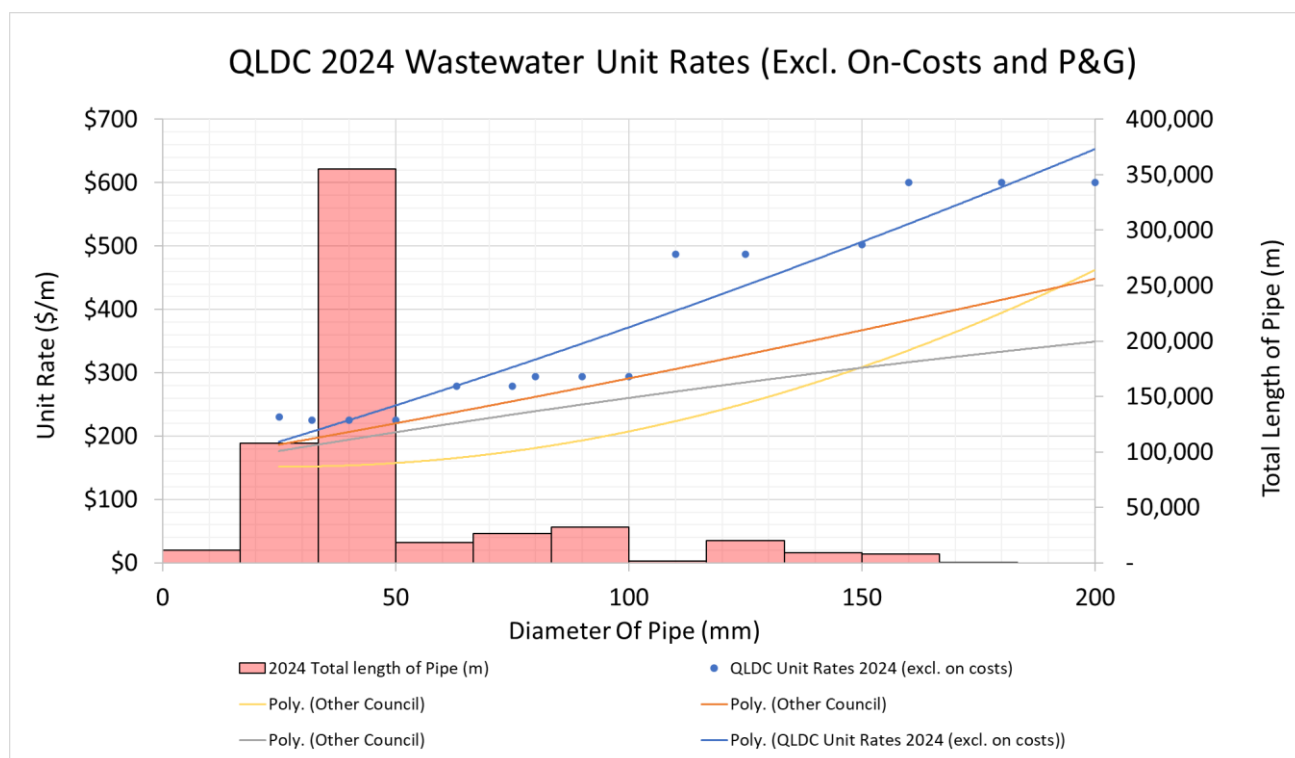


Figure 9-1: Wastewater Pipes Unit Rates Comparison

Note that as reticulation assets have not been escalated, the unit rate values are the same as what was presented in the 2023 valuation report.

Table 9-2: Wastewater Points Unit Rate and Life Expectancy

Asset Type	Unit Rate (Excl. On Cost)	Useful Life	Quantity (each)
Manholes	\$7,543	85	8,499
Meters	\$7,137	20	6
Connections	\$24,903	60	66
Valves	\$9,010	20	518

Note that useful lives vary within asset types based on material, but generally align to what is listed above.

9.2 WATER SUPPLY

Table 9-3: Water Supply Reticulation Unit Rates

Pipe Diameter (mm)	Unit Rate (Excl. On-Cost)	Quantity (m)
50	\$231	115,164
75	\$283	32,596
100	\$299	173,251
125	\$559	28,038
150	\$563	90,912
200	\$722	80,479
225	\$665	13,491
250	\$668	17,894
300	\$768	19,471
375	\$858	12,627
400	\$1,019	4,276
450	\$1,032	5,856
500	\$1,239	6,110
600	\$1,457	3,124
1000	\$2,977	10
Total		603,298

Note that this does not include the 16,044m of lump sum 'dummy' laterals.

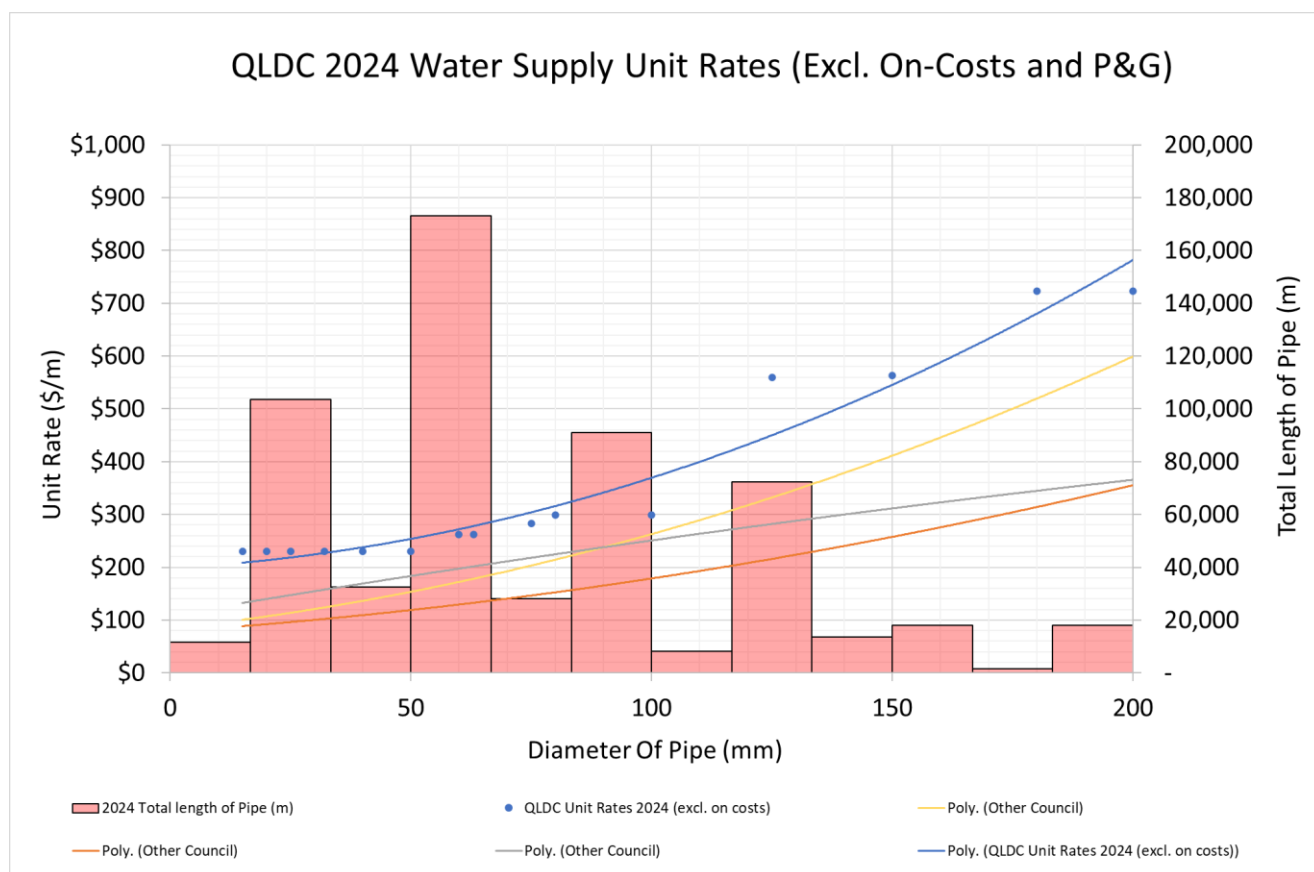


Figure 9-2: Water Supply Reticulation Comparison

Note that as reticulation assets have not been escalated, the series values are the same as what was presented in the 2023 valuation report.

Table 9-4: Water Supply Points

Asset Type	Unit Rate (Excl. On Cost)	Useful Life	Quantity (each)
Valves	\$928	60	22,669
Meters	\$838	20	1,795
Hydrants	\$3,846	70	2,925
Backflow Device	\$13,273	20	89

Note that useful lives vary within asset types based on material, but generally align to what is listed above.

9.3 STORMWATER

Table 9-5: Stormwater Reticulation Unit Rates

Pipe Diameter (mm)	Unit Rate (Excl. On-Cost)	Quantity (m)
100	\$357	82,204
125	\$481	11,591
150	\$493	22,582
200	\$523	35,089
225	\$661	68,461
250	\$665	21,577
300	\$769	85,338
325	\$863	1,045
400	\$1,025	33,970
450	\$1,039	23,856
475	\$1,247	1,655
600	\$1,465	25,438
700	\$1,885	3,224
750	\$1,995	6,820
800	\$2,109	498
900	\$2,454	5,948
1200	\$3,578	5,738
1350	\$4,423	1,335
1500	\$4,922	1,252
1770	\$5,401	1,004
1800	\$6,726	156
2000	\$7,234	241
2500	\$8,175	407
3400	\$9,642	23
Total		439,451

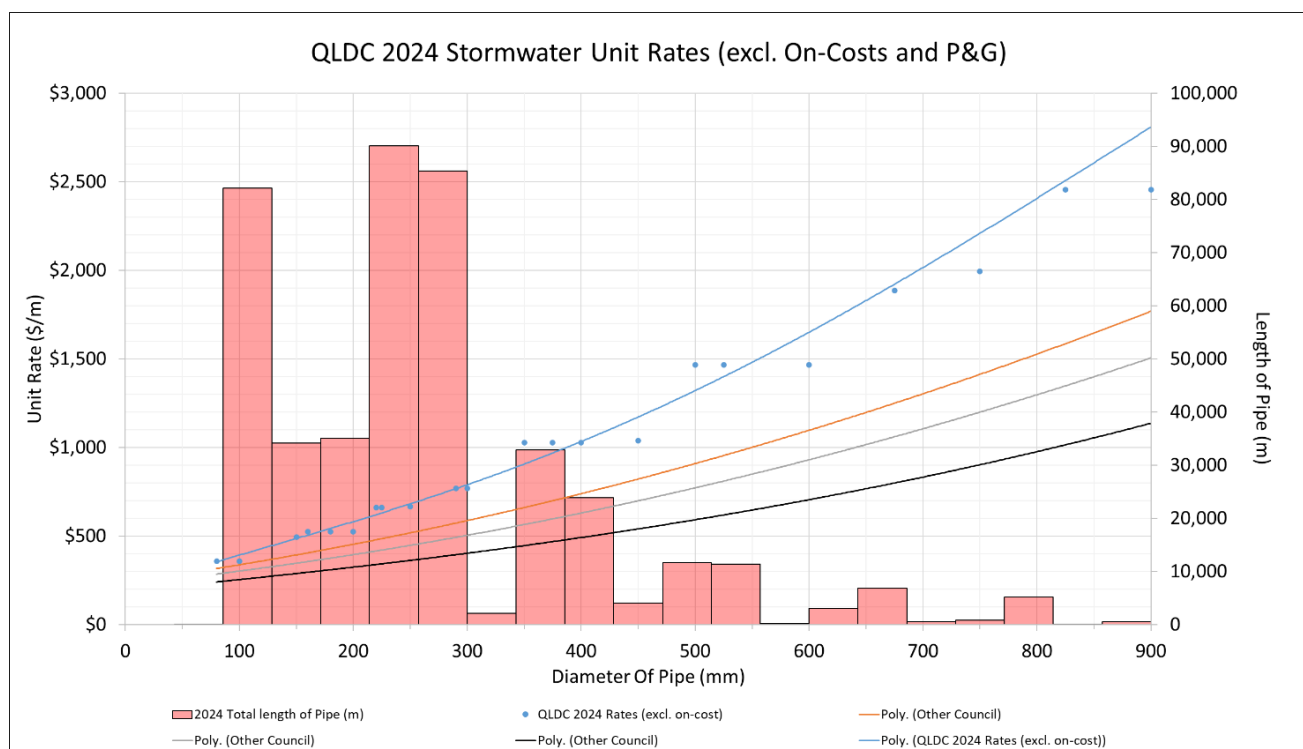


Figure 9-3: Stormwater Reticulation Comparison

Note that as reticulation assets have not been escalated, the series values are the same as what was presented in the 2023 valuation report.

Table 9-6: Stormwater Points

Asset Type	Unit Rate (Excl. On Cost)	Useful Life	Quantity (each)
Stormwater Pit	\$7,351	60	5
Manholes	\$7,351	80	6,796
Storage Basin	\$6,238	60	89
End Structure	\$7,351	50	1,588
Treatment Device	\$6,238	50	150
Valves	\$7,351	20	20

Note that useful lives vary within asset types based on material, but generally align to what is listed above.

9.4 FACILITIES

Facilities assets have been valued with unique unit rates for each asset. For assets that were valued in 2023, then the unit rate from the 2023 valuation has been used and escalated. For assets that were not valued in 2022, then the closing asset cost in the booking data was used as a unit rate (including on-cost) in lieu of any other information. Standard unit rates could not be produced as no usable quantity information is stored within the facilities database.

10 APPENDIX C: HISTORICAL COMPARISON OF VALUATION RESULTS

10.1 COMPARISON

The figure below shows the movement in ORC and ODRC since QLDC's 2019 valuation. ODRC has increased from \$770M to \$1.27B since 2019.

Figure 10-1: Historical valuation figure trend

