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## Document control

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## Executive summary

Tonkin & Taylor Ltd (T+T) has been engaged by Whakatāne District Council (WDC) to review the recently adopted 2024 – 2034 Long Term Plan (LTP) budgets and create an updated “stress-tested” compliant budget for Local Water Done Well (LWDW) decision making and to ensure that budgets meet requirements of regulators and LWDW legislation. This work aimed to specifically identify potential savings across Capital Expenditure (CAPEX) and Operational Expenditure (OPEX) budgets to support WDC’s ability to continue operating as an internal standalone three waters business unit under LWDW.

Our approach to this review has been materiality based – focusing on the largest project investment areas that have the greatest impact on the overall budget. This ‘80/20’ approach was adopted to focus effort given the tight timeframes and desire from WDC to focus on main areas where budget changes could be made (this roughly correlated to 20 % of projects that contribute 80 % of the expenditure across the 10 and 30 year time horizons).

A key assumption underpinning our review is that the budgets must be sized for the following legislative requirements:

- Sustainable investment (we have taken this as investment matches depreciation).
- Enables projected growth.
- Achieves regulatory compliance (Taumata Arowai and Bay of Plenty Regional Council).

For our review comparison, we have adopted the following baseline budgets:

- The baseline budget for Years 1 – 10 is the adopted LTP budget.
- The baseline budget for Years 11 – 30 uses the corresponding budget from the 2024 – 2054 Infrastructure Strategy which has not had financial constraints applied.

WDC have met with regulators (Taumata Arowai, Bay of Plenty Regional Council) who have provided advice on the investment requirements for compliance based on proposed new wastewater performance standards that were released for consultation in early March 2025. The advice provided by the regulators has been incorporated into finalising our LWDW compliant budget.

Our review has highlighted a number of main budget changes and key considerations (all figures provided in this report are uninflated). The following summarises the main budget changes compared against the baseline WDC budgets reviewed:

- The total three waters CAPEX investment over 30 years is \$601.5 million. In comparison, the 2024 – 2054 Infrastructure Strategy CAPEX investment was \$744 million.
- The \$142.5 million reduction in CAPEX investment is primarily driven by decreases in the Whakatāne, Edgumbe and Tāneatua Wastewater Treatment Plant (WWTP) budget which was originally \$156 million in the Infrastructure Strategy and is now \$26.5 million with only Edgumbe WWTP upgrade required and some consenting cost allowance for Tāneatua. In addition, there has been a reduction of \$8 million in assumed wastewater pond desludging requirements. The remaining \$5 million reduction is based on minor changes to various major projects and adjustments in renewals across Years 1 – 10 to match depreciation.
- The total three waters OPEX investment over 30 years is \$1.03 billion. This is an increase of \$52 million on the OPEX information provided for review and is wholly driven by the inclusion of consequential OPEX for new and upgraded WWTPs and WTPs.

The key considerations and assumptions of our review are:

- In general, our review found that the assessed major projects are not considered “gold plated” except for the Matatā Wastewater Scheme which has been highlighted for further consideration. This is based on WDC not currently servicing this township and therefore there is no existing regulatory compliance driver to construct the scheme. We note that there are other drivers (growth, community desire and wider environmental concerns) that warrant this project remaining in the budget. The existing \$36 million for this project has been left in the budget at this stage.
- Whakatāne and Tāneatua WWTP upgrade projects have been removed based on recent discussions held between WDC and regulators. The advice provided by the regulators to WDC was in light of newly proposed wastewater performance standards released for consultation in early March. Confirmation that Tāneatua does not require an upgrade is subject to an independent assessment that WDC have commissioned to determine if the WWTP meets the definition of a small WWTP in the new proposed wastewater performance standards. \$1.4 million remains in 2026 for Tāneatua WWTP for consenting costs and any possible minor upgrades required.
- While the above advice has been incorporated into the LWDW compliant budget we note that the proposed wastewater performance standards that have been released for consultation could change before they are finalised. This may have a significant impact on overall WWTP costs with upgrades possibly being required if standards and plant category sizes are increased.
- Wastewater pond desludging projects have been decreased by \$8 million on the basis that recent concept designs for Edgecumbe WWTP upgrade utilise the existing ponds for flow balancing. Therefore, desludging requirements have been assumed to be lower than initially estimated.
- Various Water Treatment Plant (WTP) and water reservoir renewals projects have been increased back to original Infrastructure Strategy budget amounts as they cannot be scaled in the same way as other network renewals.
- Renewals across three waters have had a minor net increase of \$1 million over Years 1 – 10 when compared against projected depreciation levels.
- The renewals assessment approach does not address any of the backlog over 30 years (approximately \$96 m as highlighted by MartinJenkins). This assumption would need to be tested with both the regulator and DIA.
- Our review approach only focussed on 15 major projects and programmes that contribute approximately 80 % of the indicative compliant budget in Years 1 – 10. The remaining smaller CAPEX projects amount to \$197 million spread out over Years 1 – 30 and should be reviewed before submitting a Water Service Delivery Plan.
- Additional consequential OPEX costs have been included that relates to new and upgraded WWTP and WTPs. This equates to \$52 million additional over 30 years. We note that WDC expectations are that OPEX costs in the network will reduce as a result of increased renewals (compared to historic renewals levels) which may offset this increase in treatment costs. This assumption has not been tested or included into our overall OPEX assessment but could be explored further.

There are several additional levers and investigation avenues that could be explored to further revise the timing, scope and costs of key projects. The three immediate opportunities include:

- Assess and confirm the implications of the proposed wastewater performance standards on the remaining WWTP upgrade for Murupara as well as confirmation that Tāneatua WWTP does not require an upgrade as it meets the definition of a small WWTP in the new proposed wastewater performance standards.

- Consideration of timeframes for iwi-led treatment project requirements and possibility of deferring, especially waste to land.
- Specific discussion and assessment of Matatā Wastewater Scheme including the drivers for the project and compliance requirements.

# 1 General

Tonkin & Taylor Ltd (T+T) has been engaged by Whakatāne District Council (WDC) to review the recently adopted 2024 – 2034 Long Term Plan (LTP) budgets and create an updated “stress-tested” compliant budget for Local Water Done Well (LWDW) decision making and to ensure that budgets meet requirements of regulators and LWDW legislation. This work aimed to specifically identify potential savings across Capital Expenditure (CAPEX) and Operational Expenditure (OPEX) budgets to support WDC’s ability to continue operating as an internal standalone three waters business unit under LWDW.

## 1.1 Background

The 2024 LTP budget that WDC recently adopted was constrained to balance community affordability against a needs-based budget requested by staff. The adopted budget for the 10-year LTP period was \$180 million while the requested needs-based budget was \$440 million. The main assumptions that WDC made in reducing the 10-year budgets were as follows:

- No wastewater treatment plant (WWTP) upgrades would be required to support re-consenting of four WWTPs.
- Renewals budgets could be reduced to 70 % of the requested needs-based assessment.
- Budgets for compliance, resilience projects, and other levels of service upgrades could be reduced to 50 % of what was requested in the needs-based assessment.

The LWDW legislation introduces financial requirements that are different from the LGA (ring fencing and minimum investment levels) and WDC must use these new requirements as it develops a preferred scenario and plan.

As part of the LWDW workstream, WDC engaged Martin, Jenkins & Associates Limited (MartinJenkins) to evaluate WDC current state under the new legislation. To complete this work, MartinJenkins made broad adjustments to the LTP budget, moderating the key assumptions above to approximate compliance with LWDW investment requirements. MartinJenkins’s draft findings highlighted debt funding constraints and affordability concerns that questioned the viability of WDC using a standalone business unit delivery model.

The budgets used are foundational inputs to all of the subsequent analysis and consultation. The purpose of this work is to develop a baseline budget that meets the investment requirements of LWDW while ensuring that the “needs” underpinning the projects have been tested for spending that can be deferred to improve affordability.

## 1.2 Scope

Our scope of services provided to WDC included the following:

- Ingest and understand WDC budget data.
- Identify the projects that represent the majority of the works programme (80/20 approach) and focus on these for subsequent steps.
- Hold workshops with key three waters and asset management staff to understand budget development, assumptions and constraints.
- Review of additional information provided by WDC.
- Develop baseline budgets that meet the compliance, growth, and renewal investment requirements but exclude deferrable budget.
- Workshop draft findings with executive level staff.

- Prepare a report summarising our findings (this document) and issue an updated 30-year CAPEX and OPEX budget.

### 1.3 Exclusions/limitations

This section outlines specific exclusions of our assessment, noting that the timeframes and level of detail of our approach necessitates that the budget review is high-level only.

These exclusions and limitations are as follows:

- Modifying the baseline budget for other constraints, for example deliverability or debt headroom.
- We assumed the reliability of the underlying technical analysis that WDC staff used to prepare the unconstrained budgets. We did not review, for example, asset baselives /condition scores /cost estimates, or rebuild budgets from first principles (for example, bottom-up, criticality-based renewals forecasting).
- Review of proposed works for alignment with specific WDC strategies. For example, we assumed the adequacy of the resilience projects specified in the Asset Management Plans (AMPs) and Infrastructure Strategy (IS).
- OPEX impact of interfacing between two organisations under a change to service delivery has not been assessed.
- Based on our materiality approach of reviewing budgets with largest proposed expenditure, we have not reviewed each LTP project on a line-by-line basis. Therefore, these smaller projects have not been checked against LWDW investment sufficiency tests.
- There has been no bottom-up cost estimation. All cost estimates provided by WDC have been sensed checked at a high-level against recent public industry costs and known similar project costs.

## 2 Regulator discussions and CAPEX re-profiling assessment

We note that WDC have undertaken a CAPEX re-profiling exercise to determine what projects can fit within an affordability envelope that WDC finance team have identified over the next 30 years. Our understanding is that this envelope equates to \$21 million (nominal) per year and represents the level of investment possible in a standalone three waters business unit scenario. This exercise has been undertaken by WDC to provide a basis for discussions with regulators around what compliance-based projects could be deferred (or not), and ultimately whether there is a realistic path to adopting a standalone three waters business unit under LWDW.

WDC have since met with regulators (Taumata Arowai, Bay of Plenty Regional Council) who have provided advice on the investment requirements for compliance based on the consultation version of proposed new wastewater performance standards that were released by Taumata Arowai in early March 2025. The advice provided by the regulators has been incorporated into finalising our LWDW compliant budget.

While the above advice has been incorporated into the LWDW compliant budget we note that the proposed wastewater performance standards that have been released for consultation could change before they are finalised. This may have a significant impact on overall WWTP costs with upgrades possibly being required if standards and plant category sizes are increased.



## 3 Approach

### 3.1 Overview

Our approach to this review has been materiality based – focusing on the largest project investment areas that have the greatest impact on the overall budget. A key assumption underpinning our review is that the budgets must be sized for the following legislative requirements:

- Sustainable investment (we have taken this as investment matches depreciation).
- Enables projected growth.
- Achieves regulatory compliance (Taumata Arowai and Bay of Plenty Regional Council).

In general, our approach included the following:

- An '80/20' approach to focus effort given the tight timeframes and desire from WDC to focus on main areas where budget changes could be made (this roughly correlated to 20 % of projects that contribute 80 % of the expenditure across the 10 and 30 year time horizons).
- The MartinJenkins draft report identified that the main CAPEX constraints are wastewater related in Years 11 – 20.
- From this, 15 key projects have been identified to review in further detail. The 15 major projects and programmes are outlined in Appendix A.
- We held three workshops with WDC staff (Michael Van Tilburg – Acting Manager Three Waters and Cullynn Tutua – Asset Engineer Three Waters) on the following dates:
  - 11 December 2024 (Wastewater CAPEX focus).
  - 18 December 2024 (Water supply CAPEX focus).
  - 14 January 2025 (Stormwater CAPEX and three waters OPEX focus).
- We held a workshop with WDC Executive level staff and project sponsors to incorporate any wider feedback.
- The development of the three waters indicative compliant budget was therefore undertaken in cooperation with inputs from WDC staff and relied on background knowledge and explanation of the budgets originally allowed in the AMPs and Infrastructure Strategy.

The approach to each specific area is expanded on in Sections 3.4 and 3.5.

### 3.2 Information provided by WDC

The primary inputs into our review included the following information sources provided by WDC:

- WDC 2024 – 2034 LTP document.
- Infrastructure Strategy assumptions including OPEX budgets at the service level and inflation rate factors.
- 10-year adopted LTP CAPEX budget.
- 30-year mostly constrained CAPEX budget, aligned to the changes made for the adopted LTP budget structure.
- 30-year unconstrained CAPEX budget with some projects aggregated.
- 10-year adopted LTP OPEX budget (aggregated under Direct Costs, Indirect Costs and OPEX project specific costs).
- Supporting information as identified during our workshops with staff:
  - Current state review and high-level options assessment for water services delivery (Draft), November 2024. Martin, Jenkins & Associates Limited (MartinJenkins).

- Whakatāne District Wastewater Management Options Assessment (Commercial and Confidential), December 2024. Pattle Delamore Partners Ltd (PDP).
- Whakatāne DC – Statement on Drinking Water Quality Performance – July to September 2024, December 2024. WDC.
- Whakatāne Water Supply Strategy – Concept Working Plan (Project No. 153, Dwg No. 01), December 2022. Warren McKenzie Consulting Ltd.
- Whakatāne Water Supply Strategy – Conceptual Costing spreadsheet, December 2022. Warren McKenzie Consulting Ltd.
- Whakatāne District Reservoir Assessment Report (Contract 20-025, A1693855), October 2020. GHD Ltd.
- Water Reservoirs Assessment Report October Inspection and Capital Renewal Works Programme (A1809453), October 2020. GHD Ltd.
- Current wastewater consents for all WWTPs.
- Example OPEX costs for Braemar and Otumahi Water Treatment Plant (WTP) upgrades.
- Braemar WTP capacity information.
- Otumahi reservoir and pipe costs.

### 3.3 Baseline WDC budgets

For our review comparison, we have adopted the following baseline budgets:

- The baseline budget for Years 1 – 10 is the adopted LTP budget.
- The baseline budget for Years 11 – 30 uses the corresponding budget from the 2024 – 2054 Infrastructure Strategy which has not had financial constraints applied.

### 3.4 CAPEX

#### 3.4.1 Growth driven projects

Growth driven projects were assessed against proposed growth areas in the LTP to determine if sufficient projects exist to unlock this growth. We note that none of the identified major projects are primarily growth driven. However, the following projects have growth as a sub-driver:

- Matatā Wastewater Scheme (Project 512001 - Matatā Wastewater Scheme).
- Rangitāiki Plains - Johnson Road WTP upgrades (included in Project 414592 - PLAINS W - Water Safety Plans).
- Whitepine reservoir (included in Project 410032 - EQ Water Storage).

#### 3.4.2 Compliance driven projects

- The identified major projects that are primarily driven by regulatory compliance were all related to WWTP upgrades to support re-consenting of existing WWTPs.
- Our review involved a high-level assessment of current resource consents compared against likely new consent conditions and any resulting upgrades that may be required. These WWTPs include:
  - Whakatāne.
  - Edgecumbe.
  - Murupara.
  - Tāneatua.

- The Water Services Authority – Taumata Arowai has recently released proposed new wastewater performance standards (National Wastewater Environmental Performance Standards) that set the proposed compliance level requirements for WWTPs. We have not reviewed the proposed standards as part of our assessment. We note that these are at the consultation stage and have not yet been adopted.
- WDC have since met with regulators who have provided advice on the investment requirements for compliance based on new proposed wastewater performance standards that were released in early March. The advice provided by the regulators has been incorporated into finalising our LWDW compliant budget (refer section 4.2 below).
- The recent Whakatāne and Edgecumbe combined WWTP upgrade options assessment and cost estimates<sup>1</sup> provided by WDC has been used in conjunction with other recent WWTP cost estimation that T+T has been involved in as the primary source for reviewing WWTP budgets.

### 3.4.3 Other Levels of Service (LOS) projects

The high-level approach to assessing minimum required spend for LOS projects that aren't compliance driven involved determining if the project is going to increase LOS or whether the project is a required upgrade to maintain an already established LOS. If it is the former, then this project can be considered "gold plated" (refer Section 3.4.5). If it is the latter, then the project can be considered necessary. We note that many of the major projects that fall into this category have growth and resilience drivers in addition to upgrades required to maintain existing LOS.

#### 3.4.4 Renewals

- We have assumed that for renewals to be compliant under LWDW then at a minimum investment levels are required to match depreciation.
- On this basis, a high-level three waters portfolio analysis has been undertaken comparing depreciation amounts against budgeted renewals across each water service.
- We note that this has only been undertaken for Years 1 – 10 where depreciation information has been provided by WDC.
- We have also identified renewal-based projects that can't be scaled (e.g., water reservoirs).

#### 3.4.5 Gold plating checks

The following high-level qualitative criteria have been applied in our approach to identifying "gold plated" projects that might be deferred. These criteria have been applied in general across all CAPEX projects:

- Is the project primarily about improving level of service (e.g., resilience), as opposed to enabling growth, compliance, or justifiable minimum renewals?
- Does the project exceed the minimum compliance requirements?
- Has appropriate staging been assessed or allowed for?

To assist the gold plating checks, the information obtained from workshop discussions with WDC staff has been relied upon as staff have first-hand knowledge and experience of the three waters networks. In addition, any provided cost estimates have been sensed checked against known industry costs or recent T+T projects.

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<sup>1</sup> Whakatane District Wastewater Management Options Assessment (Commercial and Confidential), December 2024. Pattie Delamore Partners Ltd (PDP).

In general, our review found that the assessed major projects are not considered “gold plated” except for the Matatā Wastewater Scheme which has been flagged for further consideration to determine overall project drivers (refer Section 4.3 for further details).

### 3.5 OPEX

From the information provided, OPEX costs are split into the following categories at WDC:

- Indirect OPEX costs.
- Direct OPEX costs.
- OPEX project budgets.

For Indirect OPEX and Direct OPEX costs we have been provided water service activity level budgets over 30 years.

We have only been provided OPEX project costs for Years 1 – 10. In lieu of not having OPEX specific project costs for Years 11 – 30 we have assumed that OPEX project costs would be maintained at the average of Years 1 – 10. In keeping with the wider ‘80/20’ approach we have concentrated our OPEX project review on consequential OPEX noting that these costs are often significant compared to other OPEX project costs.

#### 3.5.1 OPEX trends

OPEX trends have been assessed against LTP reported levels and in conjunction with recent financial modelling undertaken by MartinJenkins<sup>2</sup>. We have relied upon this financial modelling for insights into historic OPEX costs as we have not sighted historic OPEX costs as part of our review.

For future trends we have assessed the nominal projected OPEX costs over the 2024 – 2034 LTP period based on information provided by WDC. In addition, the workshops with staff identified examples of recent OPEX costs related to upgrades which is discussed further in Section 3.5.2 below.

#### 3.5.2 Consequential OPEX

Existing OPEX projects were reviewed to determine if appropriate consequential OPEX has been included for major CAPEX investment. In addition, where the timing for a major CAPEX project has been revised, any consequential OPEX has been shifted accordingly.

As noted previously, the WWTP cost estimates provided by WDC provide a good indication of likely CAPEX and OPEX costs to comply with new wastewater performance standards. The following high-level assumptions have been made for consequential OPEX with these costs starting the year following completion of physical works:

- Murupara WWTP upgrade \$0.5 million per year additional (starting 2029).
- Matatā new WWTP \$0.75 million per year (starting 2030).
- Edgecumbe WWTP upgrade \$0.5 million per year additional (starting 2032).

For WTP consequential OPEX, an assessment of recent upgrades at Braemar WTP showed that average annual OPEX costs had increased from \$40,000 to \$340,000. Therefore, the following high-level assumptions have been applied:

- Whakatāne WTP upgrade \$0.5 million per year additional (starting 2038).

<sup>2</sup> Current state review and high-level options assessment for water services delivery (Draft), November 2024. Martin, Jenkins & Associates Limited (MartinJenkins).

We note that WDC expectations are that OPEX costs in the network will reduce as a result of increased renewals (compared to historic renewals levels). This assumption has not been included in our overall OPEX assessment as it is out of scope. This could be explored further by WDC to determine what additional OPEX cost savings could be made.

## 4 Findings - CAPEX projects

This section outlines the main findings related to the 15 major CAPEX projects. Any reference to adjustments in timing or budget value are in relation to what WDC have adopted in their LTP and what was allowed for in the Infrastructure Strategy. All values stated are nominal (uninflated). Additional detail on each major project can be found in Appendix A.

### 4.1 Growth driven projects

As outlined earlier, none of the major projects are primarily growth driven and therefore there are no findings to note.

### 4.2 Compliance driven projects

The main compliance driven budget findings are as follows:

- The following WWTPs are up for consent in 2026:
  - Whakatāne WWTP
  - Edgecumbe WWTP
  - Murupara WWTP
  - Tāneatua WWTP
- Of the above WWTPs, Edgecumbe and Murupara will likely require a step change in treatment levels to meet the newly proposed wastewater performance standards and associated likely new consent conditions.
- Recent discussions held between WDC and regulators have identified that the proposed upgrades to Whakatāne WWTP would no longer be required under the newly proposed wastewater performance standards. This is due to the existing ocean outfall meeting these proposed new standards. Therefore, based on this advice, this upgrade has been excluded from the budget.
- Similarly, WDC and regulators have identified that Tāneatua WWTP may qualify as a small scheme under the new proposed wastewater performance standards. Therefore, based on this advice, this project has been excluded from the budget. We note that WDC are currently getting an independent assessment to confirm if this scheme meets the above definition and would be subject to the wastewater performance standards being implemented as proposed with no amendments to the definition of a small WWTP. \$1.4 million remains in 2026 for Tāneatua WWTP for consenting costs and any possible minor upgrades required.
- Therefore, WWTP upgrades totalling \$55 million have been moved into Years 1 – 10 that had been deferred to Years 11 – 30.
- Wastewater pond desludging projects have been decreased by \$8 million on the basis that recent concept designs for the Whakatāne and Edgecumbe combined WWTP upgrade utilise the existing ponds for flow balancing. Therefore, desludging requirements have been assumed to be lower than initially estimated.

### 4.3 Other Levels of Service (LOS) projects

The main findings for projects driven by other LOS considerations are as follows:

- Matatā Wastewater Scheme has been highlighted for further consideration based on WDC not currently servicing this township and therefore there is no existing regulatory compliance driver to construct this scheme. We note that there are other drivers (growth, community desire and wider environmental concerns) that warrant this project remaining in the budget. The existing \$36 million for this project has been left in the budget at this stage.
- Various WTP and water reservoir projects have been increased back to original Infrastructure budget amounts.
- The Edgecumbe stormwater study project which aims to address known historic flooding issues and loss of LOS for properties in Edgecumbe has been moved forward to 2028 from 2031 and the budget reinstated to \$3.4 million (adopted budget was reduced by 50 %).

#### 4.4 Renewals

The main findings for renewals driven projects are as follows:

- Renewals across the e waters have had a minor net increase of \$1 million over Years 1 – 10 when compared against projected depreciation levels. This shows that the proposed renewals over the LTP period is largely consistent with depreciation. This level of assessment has not been undertaken for Years 11 – 30 as no depreciation information was available. We note that renewals budgets for Years 11 – 30 have been matched to Infrastructure Strategy budgets on the basis that these are primarily driven by asset system information as informed by known condition information.
- Individual asset renewals programmes for water reservoirs and WTPs have generally been adjusted to match budget levels in the Infrastructure Strategy after being sensed checked against recent reservoir and WTP upgrade costs. These comprise one-off reservoir and WTP renewals that cannot be scaled over time.
- The renewals assessment approach does not address any of the backlog over 30 years (approximately \$96 m as highlighted by MartinJenkins). This assumption would need to be tested with both the regulator and Department of Internal Affairs (DIA).

### 5 Findings - OPEX spend

The main findings of our OPEX spend review are as follows:

- Indirect and direct OPEX budgets provided by WDC have been reviewed at the water service activity level. Excluding OPEX projects, general OPEX cost has been projected to increase in the 2024 – 2034 LTP from approximately \$25.4 million to \$29.3 million over Years 1 – 10. This is a modest increase and is well below annual historic OPEX cost increases as outlined in recent financial modelling by MartinJenkins.
- Based on this modest increase over 30 years, there have been no adjustments made to the base level OPEX costs.
- OPEX projects have been provided for Years 1 – 10 only. In lieu of not having OPEX specific project costs for Years 11 – 30 we have assumed that OPEX project costs would be maintained at the average of Years 1 – 10. This equates to \$3.8 million per year. Our review highlighted that no allowance has been made for consequential OPEX related to WWTP and WTP upgrades.
- Additional consequential OPEX costs have been included that relates to new and upgraded WWTP and WTPs. This equates to \$52 million additional OPEX over 30 years which is a significant increase. We note that WDC expectations are that OPEX costs in the network will reduce as a result of increased renewals (compared to historic renewals levels) which may

offset this increase in treatment costs. This assumption has not been tested or included into our overall OPEX assessment but could be explored further.

- Our workshop discussions with WDC staff highlighted that external consultant costs have increased significantly due to Water Reform requirements dating back to 2019. Due to the level of involvement required as part of Water Reform and now LWDW, external resourcing was required and has only increased in recent years. Until LWDW reforms are finalised, this trend is expected to continue into the near future.
- Newer technology upgrades to assets results in higher operational costs. This is supported in part based on our review of recent upgrades at Braemer WTP which noted that annual average OPEX costs have increased from \$40,000 to \$310,000 since upgrades were installed in 2023. Higher treatment requirements with greater associated monitoring necessitates more complex technology and use of treatment consumables. This trend is set to continue into the future across both water and wastewater treatment systems.

## 6 Indicative compliant budget

The following figures Figure 6.1 and Figure 6.2) show the indicative compliant budget profiles for CAPEX and OPEX over 30 years. The values shown are nominal (uninflated).

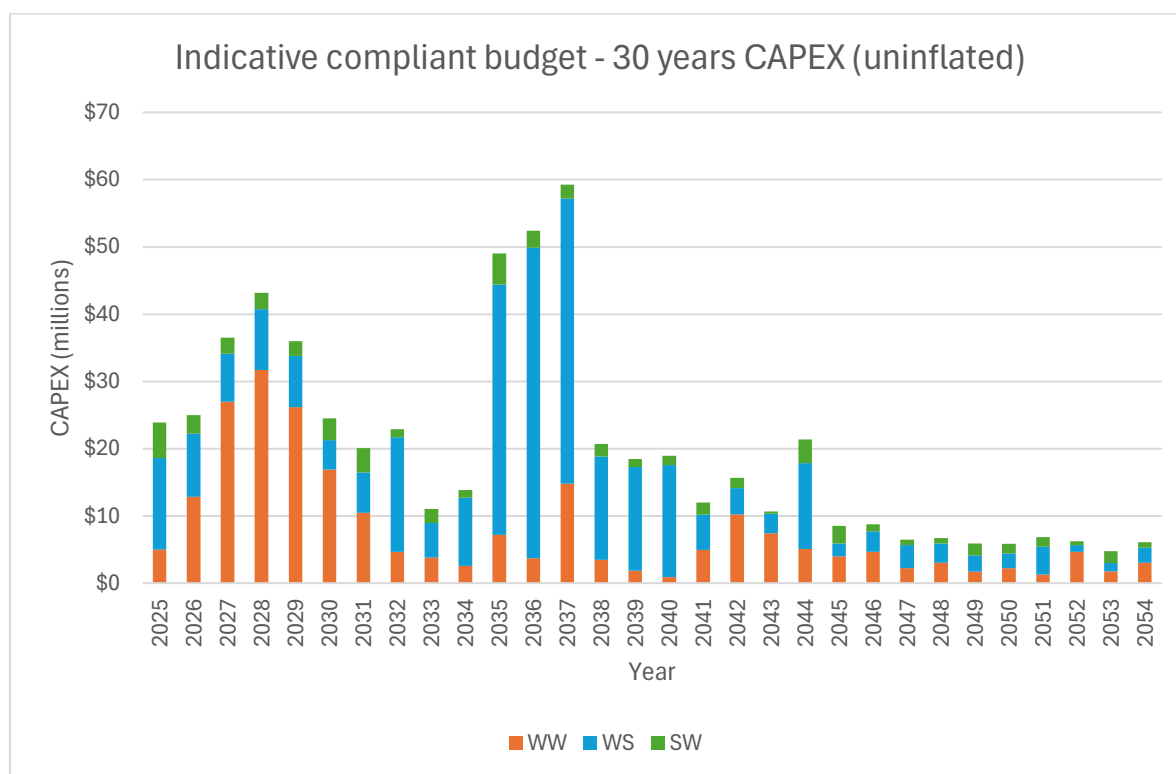


Figure 6.1: Indicative compliant budget – 30 years CAPEX.

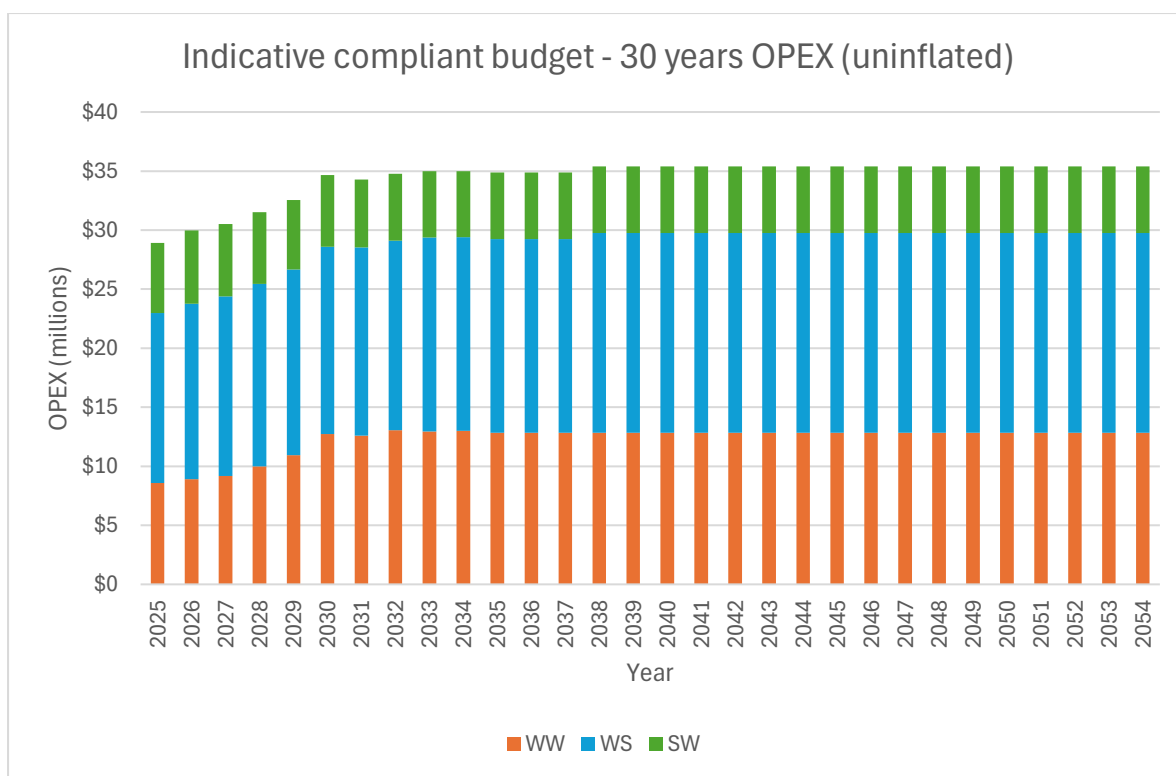


Figure 6.2: Indicative compliant budget – 30 years OPEX.

## 7 Summary

### 7.1 Main budget changes and key considerations

Our review has highlighted a number of main budget changes and key considerations.

The following summarises the main budget changes compared against the baseline WDC budgets reviewed:

- The total three waters CAPEX investment over 30 years is \$601.5 million. In comparison, the 2024 – 2054 Infrastructure Strategy CAPEX investment was \$744 million.
- The \$142.5 million reduction in CAPEX investment is primarily driven by decreases in the Whakatāne, Edgecumbe and Tāneatua WWTP budget which was originally \$156 million in the Infrastructure Strategy and is now \$26.5 million with only Edgecumbe WWTP upgrade required and some consenting cost allowance for Tāneatua. In addition, there has been a reduction of \$8 million in assumed wastewater pond desludging requirements. The remaining \$5 million reduction is based on minor changes to various major projects and adjustments in renewals across Years 1 – 10 to match depreciation.
- The total three waters OPEX investment over 30 years is \$1.03 billion. This is an increase of \$52 million on the OPEX information provided for review and is wholly driven by the inclusion of consequential OPEX for new and upgraded WWTPs and WTPs.

Key considerations and assumptions:

- In general, our review found that the assessed major projects are not considered “gold plated” except for the Matatā Wastewater Scheme which has been highlighted for further consideration. This is based on WDC not currently servicing this township and therefore there is no existing regulatory compliance driver to construct the scheme. We note that there are other drivers (growth, community desire and wider environmental concerns) that warrant this



project remaining in the budget. The existing \$36 million for this project has been left in the budget at this stage.

- Whakatāne and Tāneatua WWTP upgrade projects have been removed based on recent discussions held between WDC and regulators. The advice provided by the regulators to WDC was in light of newly proposed wastewater performance standards released for consultation in early March. Confirmation that Tāneatua does not require an upgrade is subject to an independent assessment that WDC have commissioned to determine if the WWTP meets the definition of a small WWTP in the new proposed wastewater performance standards. \$1.4 million remains in 2026 for Tāneatua WWTP for reconsenting costs and any possible minor upgrades required.
- While the above advice has been incorporated into the LWDW compliant budget we note that the proposed wastewater performance standards that have been released for consultation could change before they are finalised. This may have a significant impact on overall WWTP costs with upgrades possibly being required if standards and plant category sizes are increased.
- Wastewater pond desludging projects have been decreased by \$8 million on the basis that recent concept designs for Edgecumbe WWTP upgrade utilise the existing ponds for flow balancing. Therefore, desludging requirements have been assumed to be lower than initially estimated.
- Various WTP and water reservoir renewals projects have been increased back to original Infrastructure Strategy budget amounts as they cannot be scaled in the same way as other network renewals.
- Renewals across three waters have had a minor net increase of \$1 million over Years 1 – 10 when compared against projected depreciation levels.
- The renewals assessment approach does not address any of the backlog over 30 years (approximately \$96 m as highlighted by MartinJenkins). This assumption would need to be tested with both the regulator and DIA.
- Our review approach only focussed on 15 major projects and programmes that contribute approximately 80 % of the indicative compliant budget in Years 1 – 10. The remaining smaller CAPEX projects amount to \$197 million spread out over Years 1 – 30 and should be reviewed before submitting a Water Service Delivery Plan.
- Additional consequential OPEX costs have been included that relates to new and upgraded WWTP and WTPs. This equates to \$52 million additional over 30 years. We note that WDC expectations are that OPEX costs in the network will reduce as a result of increased renewals (compared to historic renewals levels) which may offset this increase in treatment costs. This assumption has not been tested or included into our overall OPEX assessment but could be explored further.

## 7.2 Further levers and investigation

The following additional levers and investigation could be undertaken to further revise the timing, scope and costs of key projects. These include:

- Consideration of timeframes for iwi-led treatment project requirements and possibility of deferring, especially waste to land.
- Specific discussion and assessment of Matatā Wastewater Scheme including the drivers for the project and compliance requirements.
- Reshaping of profiles for deliverability or other constraints.
- Budget profiling to meet constraints for debt/affordability or potential funding mechanisms.

- Reprofitting consequential OPEX.
- More detailed assessment into available cost estimates for the identified key projects.
- Confirmation that Tāneatua WWTP does not require an upgrade is subject to an independent assessment that WDC have commissioned to determine if the WWTP meets the definition of a small WWTP in the new proposed wastewater performance standards.
- Undertake a review of remaining smaller projects not assessed as part of this review. These projects comprise \$197 million of the 30-year indicative compliant three waters budget.

## 8 Applicability

This report has been prepared for the exclusive use of our client Whakatāne District Council, with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose, or by any person other than our client, without our prior written agreement.

Tonkin & Taylor Ltd  
Environmental and Engineering Consultants

Report prepared by:

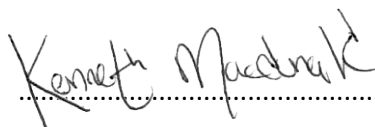


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7-Mar-25

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# Appendix A      Identified major CAPEX projects and programmes

Compliance driven projects	
Project No. and Name	Detailed observations and findings
510059 - New Wastewater Treatment Plant incorporates Whakatāne and Edgecumbe	<ul style="list-style-type: none"> <li>• Resource consents for Whakatāne and Edgecumbe expire in 2026.</li> <li>• The design and consenting for this project is underway with a draft Options Assessment report completed by PDP that considers a range of possible combined WWTP upgrades. Refinements to assumptions are ongoing at the time of our review.</li> <li>• Recent discussions held between WDC and regulators have identified that the proposed upgrades to Whakatāne WWTP would no longer be required under the newly proposed wastewater performance standards. This is due to the existing ocean outfall meeting these proposed new standards. Therefore, based on this advice, this upgrade has been excluded from the budget.</li> <li>• The Edgecumbe upgrades are to remain as the plant currently experiences some non-compliance.</li> <li>• We have adjusted the timing of this project to be included in Years 1 – 10 from 2029 through to 2031.</li> <li>• The project budget is \$25 million.</li> </ul>
XX - Wastewater Treatment Plant Tāneatua	<ul style="list-style-type: none"> <li>• Resource consents for Tāneatua expire in 2026.</li> <li>• We understand that a co-design arrangement has been established with local Iwi and concept level designs are to be initiated in the near future.</li> <li>• Recent discussions held between WDC and regulators have identified that this scheme may qualify as a smaller scheme under the new proposed wastewater performance standards. Therefore, based on this advice, this project has been excluded from the budget with the exception of \$1.4 million in 2026 for re-consenting and any minor upgrades.</li> <li>• We note that WDC are currently getting an independent assessment to confirm if this scheme meets the above definition and would be subject to the wastewater performance standards being implemented as proposed.</li> </ul>
512559 - MRP WWTP renewal and upgrade	<ul style="list-style-type: none"> <li>• Resource consents for Murupara expire in 2026.</li> <li>• Step change upgrades may be required to comply with the proposed wastewater performance standards. At this stage, this WWTP is not expected to be classed as a small scheme under these new standards.</li> <li>• We understand that a co-design arrangement has been established with local Iwi and concept level designs are to be initiated in the near future.</li> <li>• We have adjusted the timing of this project to be included in Years 1 – 10 from 2026 through to 2028.</li> <li>• The project budget is \$30 million.</li> </ul>

Compliance driven projects	
Project No. and Name	Detailed observations and findings
XX - Wastewater ponds desludging	<ul style="list-style-type: none"> <li>This project was originally included in the AMP budgets to coincide with WWTP upgrades. The step change required in treatment for these upgrades would likely render the current oxidation ponds obsolete.</li> <li>This project allows for the desludging and disposal of material and rehabilitation of the ponds.</li> <li>Based on information outlined in the Whakatāne and Edgecumbe WWTP upgrade Options Assessment report, we have assumed that the level of desludging required at Whakatāne and Edgecumbe is less than originally estimated as these ponds can be utilised as flow balance ponds.</li> <li>We have adjusted the timing of this project to be included in Years 1 – 10 to match the proposed WWTP upgrade staging from 2029 through to 2033.</li> <li>The project budget is \$10 million.</li> </ul>

Other Levels of Service (LOS) projects	
Project No. and Name	Detailed observations and findings
311501 - Edge SW - Stormwater Study	<ul style="list-style-type: none"> <li>This project aims to address known historic flooding issues and loss of LOS for properties in Edgecumbe.</li> <li>The project is likely to involve undertaking groundwater monitoring and possible associated modelling to determine the viability of low-lying areas in Edgecumbe that are susceptible to flooding in low ARI flood events.</li> <li>In addition, design and upgrades have been allowed for that may involve implementing a combined SW and WW system.</li> <li>This project has been moved forward to 2028 from 2031 and the budget reinstated to \$3.4 million (adopted budget was 50 %).</li> </ul>
410032 - EQ Water Storage	<ul style="list-style-type: none"> <li>This project is primarily related to capacity upgrades required for Whitepine reservoir to be able to continue to provide existing LOS for the community.</li> <li>The project budget has adopted the original Infrastructure Strategy budget.</li> <li>There have been no changes to project timing.</li> <li>The project budget is \$9.2 million.</li> </ul>
410135 - OtumahiW StoragePipeL Rd WMain	<ul style="list-style-type: none"> <li>This project is largely complete with a new reservoir and pipeline completed in 2024.</li> <li>The remaining budget is projected to be spent this financial year.</li> <li>No changes made in our review.</li> </ul>
414592 - PLAINS W - Water Safety Plans	<ul style="list-style-type: none"> <li>This project comprises Rangitāiki Plains - Johnson Road upgrades to meet higher arsenic treatment requirements, UV installation and to assist with growth in the Plains.</li> <li>The project budget and timing has been changed to reflect the needs-based Infrastructure Strategy timing and cost estimate.</li> <li>The project budget is \$9.8 million.</li> </ul>
512001 - Matatā Wastewater Scheme	<ul style="list-style-type: none"> <li>This is a long-standing project that has been planned for over 20+ years.</li> <li>The primary driver is to include Matatā in a WDC reticulated network and treatment based on general concerns for the adequacy of the current on-lot land disposal system, and is a response to a community desire for a centralised treatment system.</li> </ul>

Other Levels of Service (LOS) projects	
Project No. and Name	Detailed observations and findings
	<ul style="list-style-type: none"> <li>We note that based on this project being a new LOS (i.e., WDC do not currently provide wastewater services to Matatā) there is a case to say this is not required as per LWDW investment sufficiency tests.</li> <li>However, we note that there are other drivers (growth, community desire and wider environmental concerns) that warrant this project remaining in the budget.</li> <li>The existing \$36 million for this project has been left in the budget at this stage.</li> </ul>

Renewals	
Project No. and Name	Detailed observations and findings
410028 - EQ Water Network Renewals	<ul style="list-style-type: none"> <li>This renewals programme includes general network renewals (excluding Murupara and the Plains).</li> <li>Our renewals assessment approach has identified that the overall wastewater renewals in Years 1 – 10 is greater than the LTP depreciation levels by \$5.4 million. Therefore, we have further reduced this renewals programme by \$0.54 million per year in Years 1 – 10.</li> <li>Without any further depreciation information available for Years 11 – 30, we have assumed that renewals will increase back to AMP budget levels.</li> <li>The project budget is \$58.8 million.</li> </ul>
410037 - EQ New W Source and Treatment	<ul style="list-style-type: none"> <li>This renewals programme is driven by both renewals and LOS. It covers projects related to finding new water sources to replace existing and to upgrade and renew WTPs.</li> <li>The project is dominated by a WTP upgrade and associated pipeline upgrades to support WDC's overarching Water Strategy.</li> <li>There have been no adjustments to the timing and budget when compared to Infrastructure Strategy.</li> <li>The project budget is \$111 million.</li> </ul>
410123 - Whk Cond and Improv - Reservoirs	<ul style="list-style-type: none"> <li>This renewals programme includes major renewals of one-off assets such as Whakatāne 1, 2 and 3 reservoirs, Ngatiawa reservoir and Te Teko reservoir.</li> <li>This programme is primarily condition driven based on a condition assessment undertaken by GHD in 2020.</li> <li>Subsequent additional cost estimates are available as part of the Water Strategy work undertaken by Warren McKenzie Consulting Ltd in 2022.</li> <li>The adjustments in budgets have been largely to revert to Infrastructure Strategy budgets with the exception that there appeared to be a double up with Whakatāne 2 reservoir originally being included twice.</li> <li>There have been no adjustments to the timing of projects.</li> <li>The project budget is \$19.4 million.</li> </ul>
510055 - EQ ST&D Pump stn Renewals	<ul style="list-style-type: none"> <li>This includes district wide wastewater pump station renewals and upgrades required to continue to provide existing wastewater LOS.</li> <li>Our renewals assessment approach has identified that the overall wastewater renewals in Years 1 – 10 is greater than the LTP depreciation levels by \$1.8 million.</li> </ul>

Renewals	
Project No. and Name	Detailed observations and findings
	<ul style="list-style-type: none"> <li>• Due to the relative budget size of this programme and the fact that this programme contains discrete pump station renewals that cannot be reduced, we have made no changes to the LTP budget in Years 1 – 10.</li> <li>• We note that the budgets have reverted to Infrastructure Strategy investment levels for Years 11 – 30.</li> <li>• The project budget is \$16.5 million.</li> </ul>
510057 - EQ Sewer Network Renewals	<ul style="list-style-type: none"> <li>• This includes district wide wastewater network renewals.</li> <li>• As discussed above, our renewals assessment approach has identified that the overall wastewater renewals in Years 1 – 10 is greater than the LTP depreciation levels by \$1.8 million.</li> <li>• We have apportioned this reduction across this programme for Years 1 – 10.</li> <li>• We note that the budgets have reverted to Infrastructure Strategy investment levels for Years 11 – 30.</li> <li>• The project budget is \$50.5 million.</li> </ul>
510090 - WHK WW - Rising Main Renewal	<ul style="list-style-type: none"> <li>• This includes district wide wastewater rising main renewals.</li> <li>• The budget and timing has been changed to match the Infrastructure Strategy budget which is considered appropriate.</li> <li>• The project budget is \$17.7 million.</li> </ul>

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