

Advice to Greater Wellington Regional Council (GWRC) Regarding Three Waters Services Capital Expenditure (CAPEX) Delivery Plan for the Financial Years 2022/23 and 2023/24 (Y2&3 CDP)

TO Sue McLean, Kaiwhakahaere Matua Ratonga Rangapū / General Manager, Corporate Services, GWRC

COPIED TO Wellington Water: Chris Maggs - Kaiwhakahaere Matua PMO Manager, GWRC, Jeremy McKibbin, Tonia Haskell, Julie Alexander, Oddie Kralj, Gary Cullen

FROM Susannah Cullen, Manager Programme Practice, Wellington Water

DATE 30 June 2022

Action sought

	Action sought	Deadline
Sue McLean General Manager, Corporate Services, GWRC	Approve the recommendations in this paper.	06 July 2022

Contact for telephone discussion (if required)

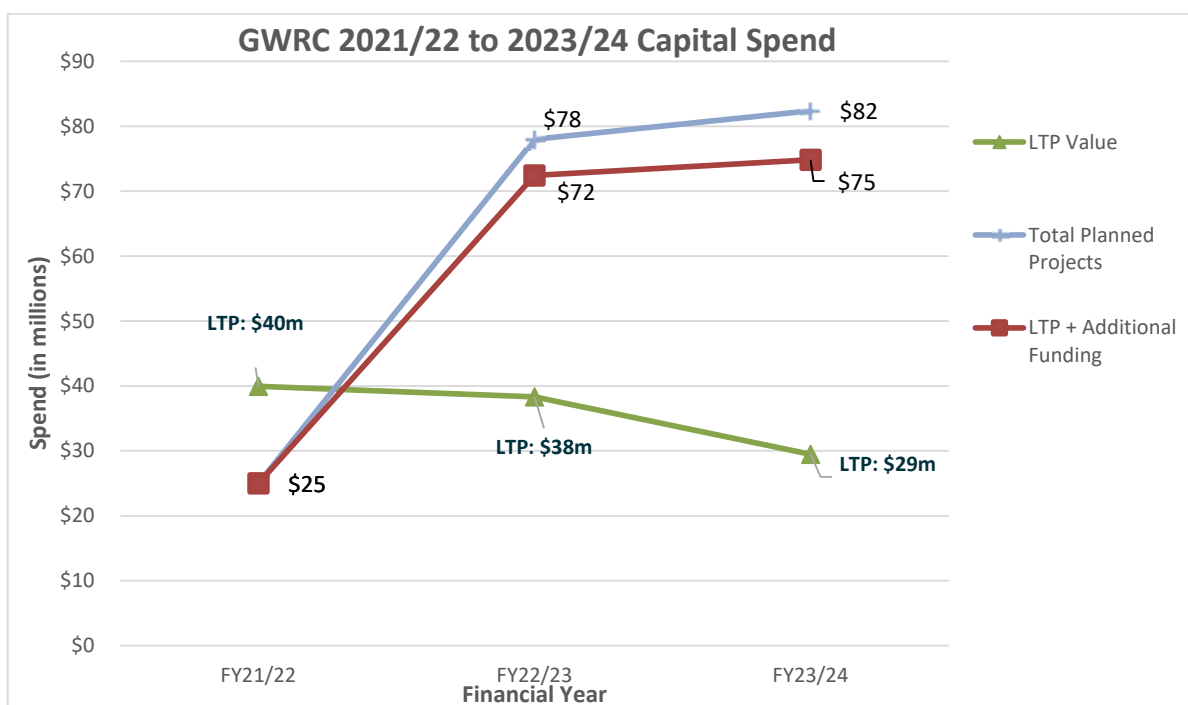
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Purpose of this advice

1. This paper provides a high-level summary of the draft capital delivery plan (CDP) Wellington Water plans to deliver in Year 2 of the LTP (FY22/23).
2. An indicative plan for delivery in Year 3 (FY23/24) is included for information, noting this will be further refined throughout Year 2.
3. Where significant risks or opportunities have been identified, these are outlined in the following sections.

Summary

4. **The budget requested for Year 2 is \$72.4M and \$74.8M for Year 3.**
5. For Year 2, the requested budget of \$72.4M comprises:
 - the approved LTP value = \$38.3M
 - Additional funding for Major Projects (Silverstream Pipebridge, Kaitoke Flume Seismic Upgrade and Te Marua Capacity Upgrade) = \$28.1M
 - Carry Over from Year 1 = \$6.0M.
6. For Year 3, the anticipated budget of \$74.8M comprises:
 - the approved LTP value = \$29.5M
 - Additional funding for Major Projects (Silverstream Pipebridge, Kaitoke Flume Seismic Upgrade and Te Marua Capacity Upgrade) = \$42.0M
 - Carry Over from Year 1 = \$3.3M.
7. Wellington Water have adopted a strategy to delivery of Years 1 to 3 of the LTP as a combined three-year programme. We are tracking towards underspending in Year 1 by approximately \$9.3M (based on a current forecast of \$25M spend for FY21/22 + \$5.6M contribution to Omāroro Reservoir and the LTP value of \$39.9M); it is proposed that this underspend be redistributed to Year 2 and Year 3, assuming \$6.0M will be used in Year 2 and \$3.3M in Year 3. These are shown as the 'carry over from Year 1' in Items 5 and 6 above.
8. The total value of the project works proposed for Year 2 is \$78.0M (see Appendix B).
9. The project value comprises 108% of the proposed budget. This over-programming against the sustained uplift mid-point estimate budget has been purposefully introduced to mitigate delivery risks and optimism bias in delivery capacity.
10. A breakdown of the proposed Year 2 and 3 budgets are presented at Appendix A.
11. It is the intention of Wellington Water to manage the delivery of these projects within the budget envelopes requested at Item 4, using Delegated Authorities within both Wellington Water and GWRC to manage movements between Council Budgets.
12. Progress against the budget spend will be reported throughout FY22/23 via the monthly finance and programme meetings.
13. Works to being delivery the Very High Criticality Assets (VHCA) programme have been introduced to Year 2 plan and will continue to be developed throughout FY22/23.
14. The plan for delivery in Year 3 (FY 23/24) will be further developed throughout Year 2.
15. There remains a risk across the region relating to availability of resources (materials and personnel).



Introduction

16. Wellington Water has been working to improve the effectiveness of what we are delivering, what we mean by this is having a focus on delivering the right assets at the right time; whether that be a renewal, level of service increase or to support growth, although our current emphasis is on renewals. We are also working to improve the efficiency of our programme delivery and beginning to bring in projects from the very high criticality asset assessment programme will contribute to improving our effectiveness.

GWRC Capex

17. The confirmed GWRC Long Term Plan (LTP) CAPEX investment is \$38.3M for Year 2 (FY22/23), with an additional \$28.1M funding having been approved by GWRC for major projects. A carry over of \$6M has also been proposed.
18. The allocation between water types and LGA Classification is shown at Appendix B.
19. We have proposed a total of 55 projects with a total value of \$78.0M (noting our intention to manage delivery of these projects within the requested budget as set out at Item 4). The proposals comprise:
- 4 Major Projects = \$59.85M
 - 13 other capital projects = \$10.8M
 - 2 land development contributions = \$250K
 - Projects self-delivered by operations (minor works and reactive) = \$7.1M.
20. Three of the largest projects (Kaitoke Flume Bridge, Silverstream Pipe Bridge and Kingsley Main Renewal) have contracts awarded with a total spend for Year 2 of \$44.1M. This provides a medium level of confidence for delivery of the programme.

Risks & Opportunities

21. **Delivery of Proposed Y2&3 CDP** - historically, Wellington Water has underspent capital against council budgets. We have worked to mitigate this risk by over-programming against the LTP across the three years.
22. **Delivery of the VHCA Programme** – initial works to identify the VHCA programme of works is underway, and an allowance has been made for the scoping of the projects in Year 2, but the full scale of the works required is not yet fully understood. Additional funding will be required in future years to complete these works.
23. **Resource and Supply Chain Constraints** – there is currently an industry wide constraint in availability of resources (both materials and personnel) which may impact the delivery of projects. To mitigate the likelihood and impact of this risk, we have worked with Consultant and Contractors to apply a deliverability lens across the projects proposed i.e., to only propose projects that we are confident we can deliver within the current known constraints.
24. **COVID Pandemic** - We continue to face impacts of the global COVID pandemic. We expect to continue to see challenges with illness, global supply chains, freight and transportation and associated price increases which will impact delivery of the programme.
25. **Delivery of Te Marua (\$17M)** – It is noted that the contract for this project has not yet been awarded and there remains a risk that the amount allocated cannot be spent in Year 2. We will monitor and report on progress.

Next steps

26. Agree any carry over budgets with GWRC and incorporate into the final budget for Year 2 delivery.
27. Once the Year 2 CDP is agreed with GWRC, we will communicate the plan with Wellington Water Groups, the Consultant Panel and Contractor Panel, and commence delivery.
28. Delivery against the agreed budget will be monitored throughout Year 2 and progress updates communicated to the council established monthly finance and programme meetings.
29. We will develop the Year 3 plan through Year 2 with a plan to submit the final Year 3 capital delivery plan at the start of Q4 FY22/23.

Recommended action

30. We recommend that you:
 - a **note** that the value of the proposed projects exceeds the councils LTP budget; this is purposeful to help mitigate delivery of risk of underspending against the council budgets.
 - b **consider** the risks and issues identified above.
 - c **note** the proposal to work with GWRC to continue to optimise the Year 3 programme ahead of the preparation of the next draft annual plan.



Appendix A – Budget Summary

	LTP Value (\$)	Carry Overs (\$)	Redistributed Carry-Overs (\$)	Reprofiled LTP (\$)	Additional Funding for Major Projects (\$)	Budgets Requested (LTP + Additional Funding) (\$)	Total Planned Projects (\$)	Project Forecast vs Revised Budget
Year 1 (FY21/22)	39,940,234	-	-	25,000,000	-	25,000,000	25,000,000	
Year 2 (FY22/23)	38,328,902	9,324,234	6,000,000	44,328,902	28,103,933	72,432,835	78,004,000	108%
Year 3 (FY23/24)	29,466,558	-	3,324,234	32,790,792	42,038,000	74,828,792	82,377,000	110%
TOTALS	107,735,694	9,324,234	9,324,234	102,119,694	70,141,933	172,261,627	185,181,000	108%



Appendix B – Year 2 Spend by Water Type and LGA Classification

Water Type	LGA Classification	LTP Year 2 Budget (\$)	Additional Funding - Major Projects (\$)	Proposed Carry Over from Year 1 (\$)	LTP Year 2 Budget + Additional Funding + Carry Overs (\$)	Proposed Projects Value Year 2 (\$)	Project Value vs Proposed Budget
Water	Growth	526,280	0	0	526,280	275,000	52%
Water	Level of Service	15,243,872	18,875,000	3,000,000	37,118,872	40,327,000	109%
Water	Renewal	22,558,750	9,228,933	3,000,000	34,787,683	37,202,000	107%
TOTALS		38,328,902	28,103,933	6,000,000	72,432,835	78,004,000	108%

Appendix C – Proposed Projects

Project Title	Water Type	LGA Classification	Value Year 2 (\$)	Value Year 3 (\$)
Kaitoke main on Silverstream Bridge	Water	Renewal	24,700,000	31,110,000
Kaitoke Flume Bridge	Water	Level of Service	17,400,000	11,080,000
Te Marua WTP Capacity Optimisation	Water	Level of Service	17,000,000	16,000,000
Kingsley Main Replacement	Water	Renewal	2,000,000	-
[Package] CP Cathodic Protection Projects Tender 2_FY 18-21	Water	Renewal	2,000,000	-
Fluoride dosing systems reliability	Water	Renewal	1,590,000	5,010,000
[Package] Gear Island and Waterloo Wells Replacements	Water	Renewal	1,575,000	3,136,000
Waterloo WTP Sodium Hypochlorite storage and dosing	Water	Level of Service	1,000,000	34,000
Te Marua Water Treatment Plant Renewals	Water	Renewal	750,000	510,000
Petone Ski-Club Pipe Bridge Upgrade	Water	Level of Service	750,000	-
Kaitoke Road Bridges Seismic Strengthening	Water	Level of Service	750,000	767,000
GWRC Smart Services & Controls Upgrades	Water	Level of Service	635,000	400,000
Whitemans Road (Pinehaven Branch) Rail Crossing Pipe Replacement	Water	Level of Service	580,000	-
Waterloo Water Treatment Plant Renewals	Water	Renewal	500,000	300,000
Lime Silo Strengthening -Waterloo WTP	Water	Level of Service	500,000	-
Bulk Water PLANNED Renewals	Water	Renewal	500,000	500,000
Bulk Water Network REACTIVE Renewals	Water	Renewal	370,000	370,000
Wainuiomata Water Treatment Plant Renewals	Water	Renewal	370,000	150,000
GWRC Water Pump Station PLANNED Renewals	Water	Renewal	340,000	75,000
Gear Island and Waterloo Wells Replacements - Part 1	Water	Level of Service	335,000	-
Bulk Water Controls REACTIVE Renewals	Water	Renewal	320,000	270,000
Te Marua WTP Pump Station Renewals	Water	Renewal	315,000	1,000,000
GWRC Reservoir VHCA Remedial Works	Water	Renewal	310,000	620,000
Gear Island WTP Renewals	Water	Renewal	300,000	300,000
Water Treatment Plants REACTIVE Renewals	Water	Renewal	300,000	300,000
Rocky Point and Ngauranga Interconnection valve chambers pipe connections	Water	Level of Service	270,000	-
GWRC-Bulk Water Network Modelling	Water	Level of Service	250,000	50,000
Bradley Reservoir Inlet Pipeline Vehicle Access	Water	Level of Service	200,000	-
Reservoir safety improvements	Water	Level of Service	200,000	2,000,000
Korokoro Stream crossing seismic resilience improvements	Water	Level of Service	200,000	1,200,000
Bulk water network supply to Plimmerton Farms Reservoir	Water	Growth	200,000	300,000
Fencing of Liverton microwave towers	Water	Level of Service	200,000	200,000
GWRC-PW- VHCA Pipe Renewal Programme	Water	Renewal	190,000	1,280,000
GWRC-CPX-Kaitoke Weir Renewal	Water	Renewal	162,000	1,620,000
Johnsonville Pump Station Renewals	Water	Renewal	150,000	1,000,000
Bulk Water Network Renewals - Valve Replacements	Water	Renewal	105,000	87,000
Waterloo WTP Wellington Pump No 4 (new)	Water	Level of Service	100,000	450,000
GWRC Bulk Water Upgrades	Water	Level of Service	68,000	68,000
Bulk water flow meter reactive renewals	Water	Renewal	65,000	65,000
Bulk Water Control Systems REACTIVE Renewals	Water	Renewal	60,000	60,000
Haywoods Bulk Main Flow Meter	Water	Renewal	50,000	450,000
VSD Replacements	Water	Renewal	50,000	50,000
Lincolnshire Pump Station Renewals	Water	Renewal	50,000	230,000

Project Title	Water Type	LGA Classification	Value Year 2 (\$)	Value Year 3 (\$)
Bulk water network supply to Plimmerton Farms North Reservoir	Water	Growth	50,000	58,000
Catchment Risk Assessment for WWL public water supply bores	Water	Level of Service	43,000	-
GWRC-CPX-Optimiser Upgrade	Water	Level of Service	40,000	40,000
GWRC Water Pump Station REACTIVE Renewals	Water	Renewal	36,000	33,000
Analogue to Digital Radios - GWRC Bulk Water	Water	Renewal	30,000	-
Real-time Stream Monitoring - Kaitoke Pilot Study	Water	Growth	15,000	-
(WSP_02.1) Reservoir leakage remediation - GWRC	Water	Renewal	14,000	14,000
Floating Solar Feasibility Te Marua Twin Lakes	Water	Growth	10,000	-
GWRC and 4 Cities SCADA network rationalisation	Water	Level of Service	6,000	-
Ngauranga Reservoir Seismic Strengthening	Water	Level of Service	-	200,000
Waterloo WTP Ground Improvements	Water	Level of Service	-	250,000
Gear Island Pump Station Renewals	Water	Renewal	-	177,000
Waterloo WTP Pump Station Renewals	Water	Renewal	-	563,000