Wellington Water

Water Meters Business Case

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COPIED TO	[redacted], Manager Service Planning, Wellington Water
	[redacted], Head of Metering Programme Establishment, Wellington Water
FROM	[redacted], Group Manager Network Strategy and Planning, Wellington Water
DATE	10 September 2024
ACTION	For noting and discussion

Contact for telephone discussion (if required)

Name	Position		1st Contact
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Purpose

1. This memo provides supporting information to Upper Hutt City Council (Council) in considering investing their share of funding to develop a regional business case for universal residential water meters in 2024-25.

Recommendations

2. Wellington Water recommends that Council:
    a. **Note** the need to progress a business case for Universal Residential Water Meters as a precursor to any delivery.
    b. **Note** the benefits of supporting the regional business case for Universal Residential Water Meters and that these will be delivered by June 2025
    c. **Note** the risks of not investing in the development of the regional business case for Universal Residential Water Meters

Background

3. Council has allocated $570,000 in year 2 of the 2024-34 Long Term Plan (LTP) for a business case on universal residential water meters to help inform consideration of and enable future decision-making.
4. To ensure sustainable water supply and demand in the wellington region the Wellington Water Committee has instructed Wellington Water (WWL) in the letter of expectation to work with councils to develop an integrated approach to water metering. Wellington Water is progressing a work programme to develop a regional business case for universal residential water meters in 2024–25. Other metropolitan councils around the region have provided funding in 2024-25.
5. The overall allocated costs for the regional business case and associated supporting work is $4.7m. This has been estimated by the project team and is in-line with a previously developed workplan provided by EY/Beca. This also aligns with the relative costs of the overall programme if metering is implemented.
6. The regional business case will provide detailed evidence on the costs/ benefits and understanding of risks to enable informed future decision-making.
7. Council is providing a report to its Finance and Performance Committee to consider bringing forward the allocated $570,000 to 2024-25 for the business case work. This being the proportion of this regional work is $570,000 based on a regional calculation of anticipated number of connections across the four local authorities in metropolitan Wellington.
8. Council has requested Wellington Water to provide additional information on why investment in business case is required.
9. In response to Council's request, this memo provides information on the background, need and deliverables from the universal residential water meters business case.

The need for Universal Residential Water Meters

10. Providing sufficient quantity of safe and healthy water while managing the environmental impact is a fundamental requirement for local councils and its water services provider.

11. A related primary objective is for customers to have sufficient water during typical summer conditions. Our region's level of service for water supply is to have sufficient water available to meet normal customer demand except in a 1-in-50-year or greater drought event.

12. Achieving this level of service can include a mixture of supply-side (i.e. water supply and storage) and demand-side (i.e. water use efficiency and leakage management) activities.

13. Achieving this level of service in the Wellington metropolitan region has been increasingly challenging due to limited water supply, increasing demand and water loss in the network.

14. Water supply is a system that runs "from catchment to tap" and encompasses supply, delivery, and use. Water security can be supported all the way along this system through applying the following **KRA**s for water supply:

    a. **K**eep the water in the pipes

    b. **R**educe water demand through water

    c. **A**dd more supply so there is enough in summer when river and aquifer availability declines.

15. In November 2020, Wellington Water provided the Water Committee and councils with an economic case, which evaluated a range of options for using water consumption information to reduce water demand, support customer engagement, reduce environmental impacts, and improve network management. The economic case considered a range of options including increased use of network meters, analogue meters, and smart meters. Options analysis concluded that only smart meters would provide the region with the benefits in terms of money spent and water saved.

16. Further to this, Wellington Water commissioned the report 'Water Source Options Assessment for Wellington Metropolitan Supply' (Options Report), completed in June 2023. This report re-confirmed and established the need for universal smart water metering as part of a three-limbed investment approach that also includes increased leakage management and new water storage lakes `

17. The Options Report underpins the recommendations presented to the Regional Water Summit in September 2023 and the investment advice that was provided to councils (including Upper Hutt City Council) for consideration for inclusion in their 2024/34 LTPs.

18. Further information and documents supporting the need for universal residential water meters are available on Wellington Water's website.
https://www.wellingtonwater.co.nz/resources/topic/water-conservation/water-meters/

The need for UHCC to participate in the of the Regional Business Case

19. Taking a regional approach is considered the most efficient and effective way to make progress this work. Development of the regional business case does not commit council to funding the implementation of metering but provides the evidence to make an informed decision.

20. The business case will assess the risks and allow a robust assessment of the regional opportunity for council to consider.

21. A joint steering group has been established with councils to enable a coordinated regional approach and ensure the work will meet council needs and facilitate future decision making.

22. Applying a common approach will also support an effective transition to a future, regional, asset-owning water services entity.

Scope of the business case for Universal Residential Water Meters

23. International experience has demonstrated that introducing metering can be a complex and high-risk activity if not carefully planned and delivered.

24. The business case will provide a workplan to inform investment decisions and help manage the risk and complexity of delivering Universal Residential Smart Meters if required. The framework for the metering case will be tailored to suit the regions needs but consistent with The Treasury's Better Business Case model.

25. The funding provided by councils will be required in the following areas leading to completion of a Detailed Business Case (DBC) for the Metering Programme for council's review by June 2025.

    a. Development of a fit-for-purpose business case to inform consideration of and decision-making on future Council investment decisions. This will include:

        - Strategic case – testing the need for investment
        - Economic case – testing if the investments offer value for money
        - Commercial case – investigating viability of investment
        - Financial case – investigating affordability of investment
        - Management case – testing achievability and benefits can be realised

    b. De-risking work to understand the technologies and installation complexities to metering deployments. This will cover:

        - Desktop study of communications & metering technologies and installation methodologies
        - Field testing and validation
        - Programme planning required to prepare informed DBC inputs and maintain engaged and involved stakeholder groups.

26. Further work is needed to understand the risks and costs of different elements of meter service delivery and the merits of different delivery models. These form part of the economic, commercial and management cases for the project and this work will be completed to support the decision to proceed to implementation.

27. The extent to which the development of the final business case will consider the costs associated with adopting a charging regime will be determined in discussions with councils. The potential application of a charging regime will be most effective if it was applied consistently across the metro region.

Risks of not progressing with Universal Residential Water Meters

28. Not progressing with Universal Smart Metering will not satisfy the required level of service for water security, and could result in:

- increase supply risks for customers and ratepayers
- increase costs to customers (by requiring investment in more expensive means of providing water security)
- increase the potential for other adverse outcomes such as freshwater degradation
- increase the risk of regulatory non-compliance.