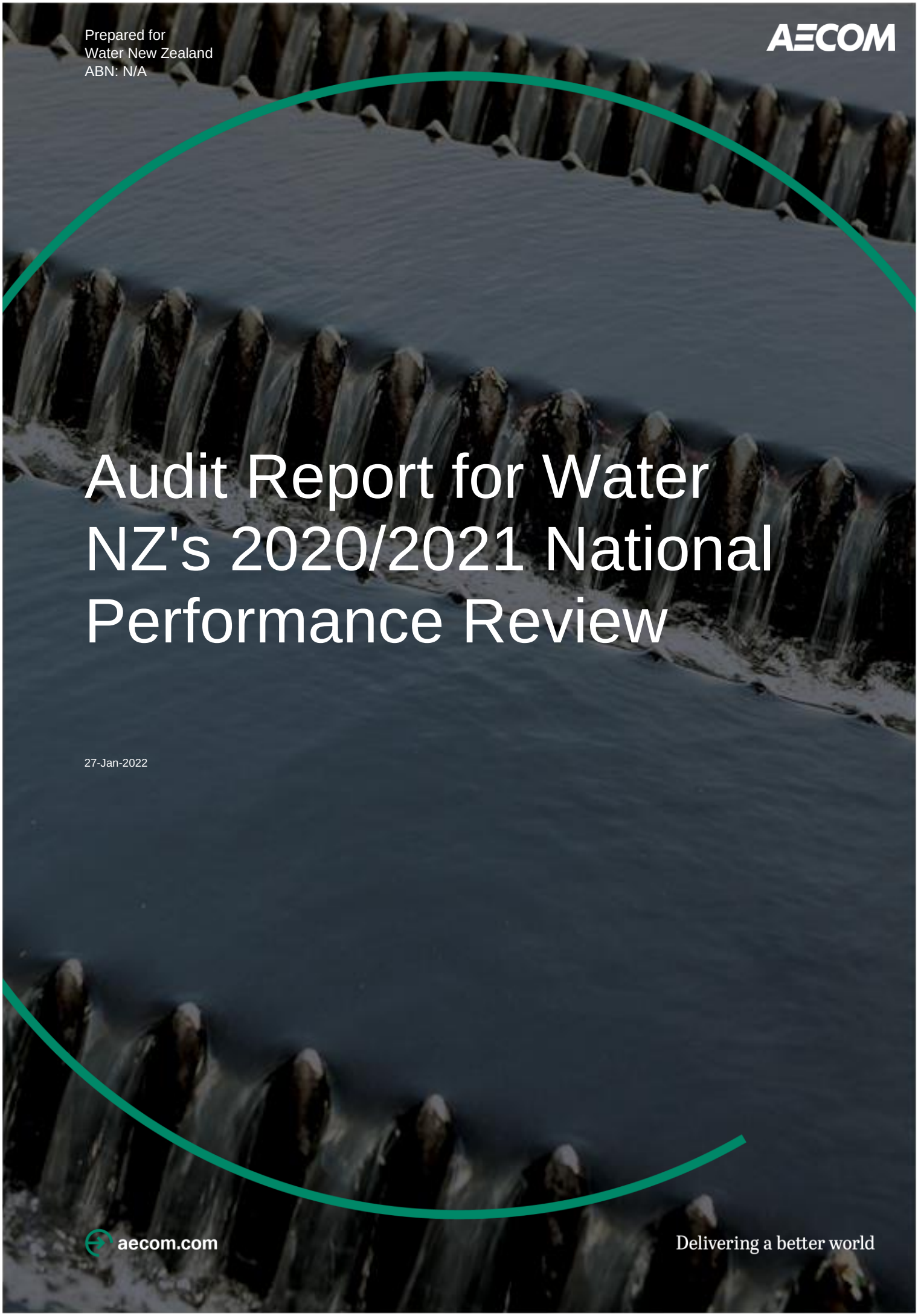

Prepared for
Water New Zealand
ABN: N/A

AECOM

Audit Report for Water NZ's 2020/2021 National Performance Review

27-Jan-2022

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Audit Report for Water NZ's 2020/2021 National Performance Review

Client: Water New Zealand

ABN: N/A

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Reviewed by	Brian Sharman

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0	26-Jan-2022	Draft for comment	Miles Wyatt Principal Consultant Strategic Asset Management	
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Table of Contents

1.0 Introduction

Each year Water New Zealand (Water NZ) carries out a National Performance Review (NPR) of organisations providing water supply, wastewater and stormwater services across New Zealand. AECOM has been contracted to provide verification audit services for the 2020/21 NPR. This report presents the verification audit findings for the 2020/21 NPR which included the following work:

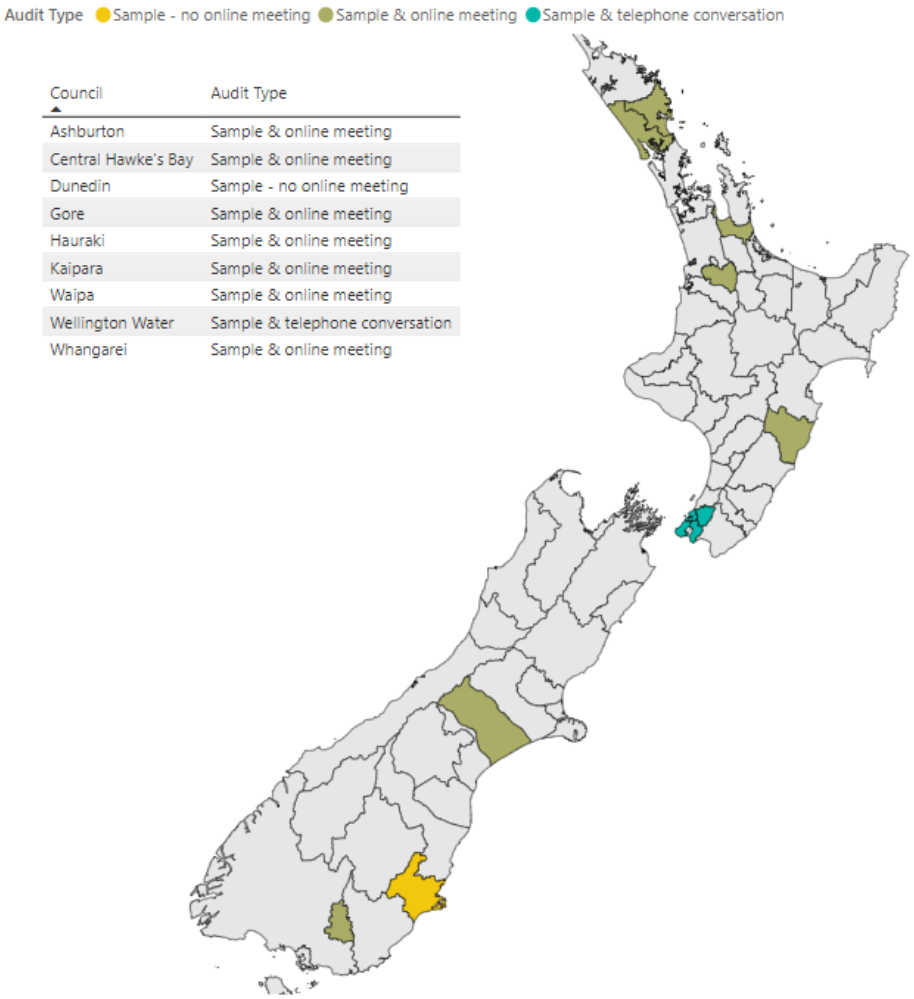
- Pre-audit webinar with audit participants
- Reviewing data return spreadsheets from organisations nominated for audits
- Preparing and conveying audit questions to participating organisations
- Online meetings to discuss audit findings and ask further audit questions
- Preparation of audit findings report.

This report documents AECOM's findings arising from the audit work. Included in Appendix A are the detailed findings from each of the organisations audited.

2.0 Methodology

2.1 Organisations Involved

Of the 38 organisations participating in the NPR, AECOM undertook 8 audits. The participating organisations were:



Council	Audit Type
Ashburton	Sample & online meeting
Central Hawke's Bay	Sample & online meeting
Dunedin	Sample - no online meeting
Gore	Sample & online meeting
Hauraki	Sample & online meeting
Kaipara	Sample & online meeting
Waipa	Sample & online meeting
Wellington Water	Sample & telephone conversation
Whangarei	Sample & online meeting

Dunedin was initially involved in the audit process but pulled out completely following the review of their data return and do not feature in the audit findings. The review of their data return is included in Appendix A but just as a record of the work that was done.

2.2 Audit Personnel

The audit was undertaken by the following people:

- Miles Wyatt - Principal Consultant, CMEngNZ, MIAM, REA, REAcap
- Brian Sharman – Director, CMEngNZ, CPEng, MInstD

Both people have suitable experience in the water industry and have been involved in a number of previous NPR audits.

2.3 Measures Audited

A pre-defined set of measures (50 in total) were identified and agreed with Water NZ for inclusion in the audits. These measures were:

Table 1 Audit Measures

Measure		Reason for inclusion
Common		
Staff		
CB10:	Internal staff	Query about tally of support staff
CB14a-1:	Staff training hours allocated	New measure
CB14a-2:	Staff training hours undertaken	New measure
CB14b:	Staff training enrolments	Recommended from last year's audit
CB15a-1:	Staff with an engineering degree	Inconsistencies in last year's reporting
CB15a-2:	Staff with a science degree	Inconsistencies in last year's reporting
CB15a-3:	Staff with another applicable degree	Inconsistencies in last year's reporting
CB16:	Continuing professional development enrolments	Recommended from last year's audit
Technology		
CB20:	Internet of things	New measure
Water Supply		
Background		
WSB8:	Average Daily Residential Water Consumption	Recommended from last year's audit
Pipelines		
WSA1b:	Length of water mains renewed using internal CAPEX	Difficulties in last year's reporting
WSA1c:	Length of new water mains constructed using internal CAPEX	Difficulties in last year's reporting
Other assets		

Measure		Reason for inclusion
WSA4a:	Water Treatment Plant Standby Generators	Definition update
WSA5a:	Water Pump Stations Standby Generators	Definition update
Water loss		
WSE1a:	Estimated total network water loss	Recommended from last year's audit
WSE1f:	UARL (unavoidable annual real loss)	Recommended from last year's audit
Response times		
WSS10b:	Resolution for urgent water supply fault call-outs	Definition update
WSS10d:	Resolution for non-urgent water supply fault call-outs	Definition update
Revenue		
WSF6:	Debt funding: Water Supply	Recommended from last year's audit
Expenditure		
WSF9a:	Routine maintenance: Water Supply	Definition update
WSF9b:	Reactive maintenance: Water Supply	Definition update
WSF10:	Management Costs: Water Supply	Definition update
WSF11:	Council Contract Management Costs : Water Supply	Definition update
Wastewater		
Background		
WWB1b:	Wastewater Service Coverage	Recommended from last year's audit
Pipelines		
WWA1b:	Length of wastewater mains renewed using internal CAPEX	Difficulties in last year's reporting
WWA1c:	Length of new wastewater mains constructed using internal CAPEX	Difficulties in last year's reporting
Other assets		
WWA5a:	Wastewater Pump Stations Standby Generators	Definition update
Treatment plants		
WWA7j-1:	Treatment Plant sludge production of wet sludge/biosolids	Recommended from last year's audit
WWA7j-2:	Percentage of dry solids in wastewater sludge/biosolids	Recommended from last year's audit
WWA7l:	Treatment Plant backup generators	Definition update
Compliance		
WWE4g:	Wet weather overflow regulation approach	Recommended from last year's audit
Trade waste		
WWE6a:	Trade waste bylaw	New measure
WWE6b:	Individual trade waste consents	New measure

Measure		Reason for inclusion
WWE6c:	Companies breaching trade waste consents	New measure
WWE6d:	Non-compliance actions in response to trade waste breaches	New measure
WWE6c:	Dedicated trade waste officer(s) on staff	New measure
Complaints		
WWS4d:	The authority's response to issues with its sewerage system	Recommended from last year's audit
Revenue		
WWF6:	Debt funding: Wastewater	Recommended from last year's audit
Expenditure		
WWF9:	Routine Maintenance: Wastewater	Definition update
WWF10:	Reactive Maintenance: Wastewater	Definition update
WWF11:	Management Costs: Wastewater	Definition update
WWF12:	Councils Contract Management Costs: Wastewater	Definition update
Stormwater		
Pipelines		
SWA1b:	Length of stormwater mains renewed using internal CAPEX	Difficulties in last year's reporting
SWA1c:	Length of new stormwater mains constructed using internal CAPEX	Difficulties in last year's reporting
Energy use		
SWE5:	Energy consumption: Stormwater	Recommended from last year's audit
Charges		
SWS1:	Stormwater Charge	Definition update
Expenditure		
SWF6a:	Routine maintenance: Stormwater	Definition update
SWF6b:	Reactive maintenance: Stormwater	Definition update
SWF7:	Management Costs: Stormwater	Definition update
SWF8:	Council Contract Management Costs: Stormwater	Definition update

In addition to the above list, other one-off measures were included where there was a perceived issue. These measures were mostly identified by Water NZ and varied for each organisation.

2.4 Audit Process

For each measure standard questions were defined and conveyed to each participating organisation in writing using the NPR spreadsheets. All organisations were requested to respond in writing prior to the online audits. Seven of the eight organisations complied with this request, the exception being Wellington Water who responded saying they were unable to answer the questions due to it seems staff being unavailable to help with answers. They did, however, respond with some additional data.

In some cases, depending on the data value provided and/or associated commentary, the questions changed or were worded slightly different from organisation to organisation. The written responses

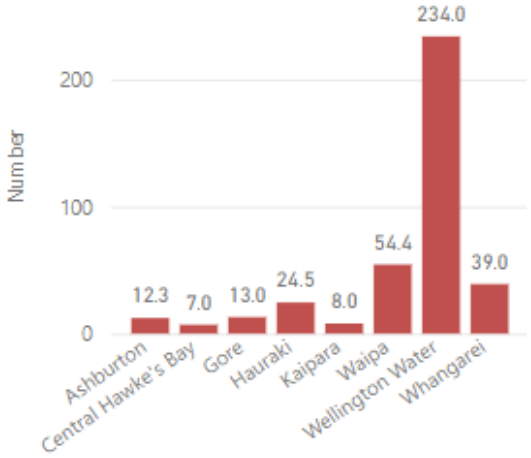
were reviewed, and further follow-up questions/clarifications were identified, which were then addressed in the online audit meetings. Online audit meetings were held with seven organisations, the exception being Wellington Water. As Wellington Water were unable to provide answers to the questions, a phone conversation was had with them to gather general feedback and comments on the NPR itself which they were happy to provide.

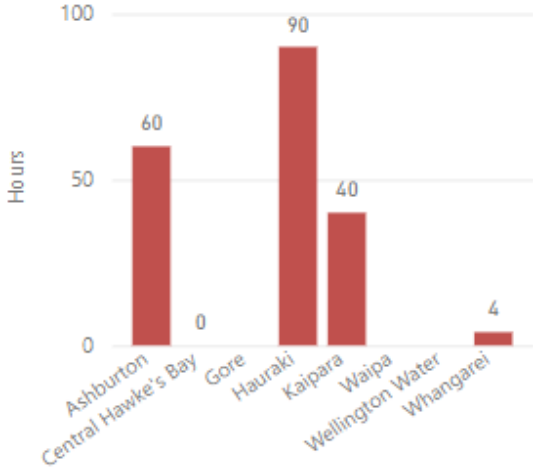
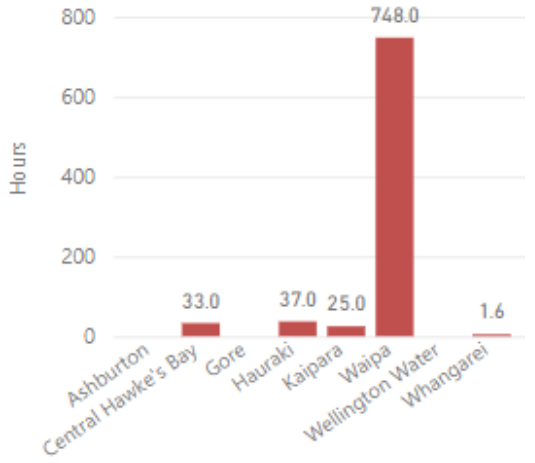
Where responses to audit measure questions were quite clear and unambiguous, often this meant no additional questions were asked.

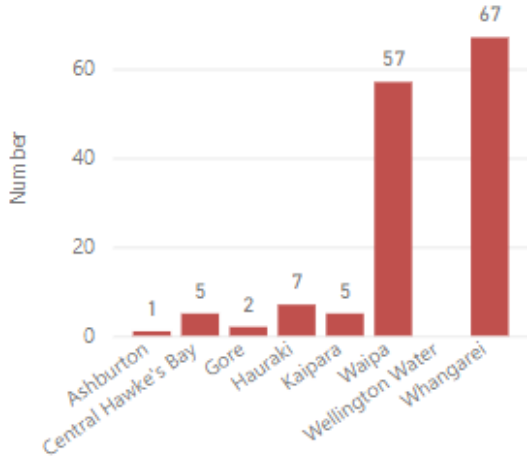
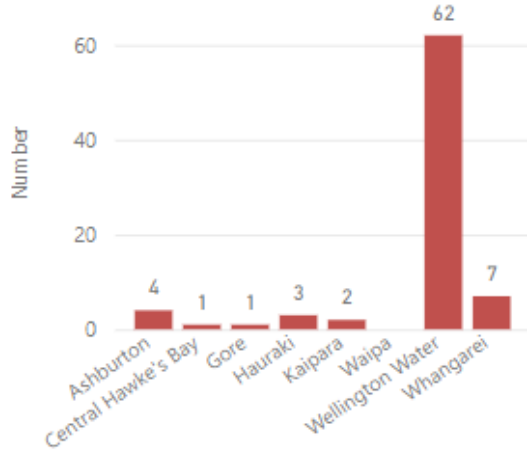
The questions and the documented responses to those questions are included in Appendix A. Issues, observations and commentary on the measures audited are covered in Section 3.0.

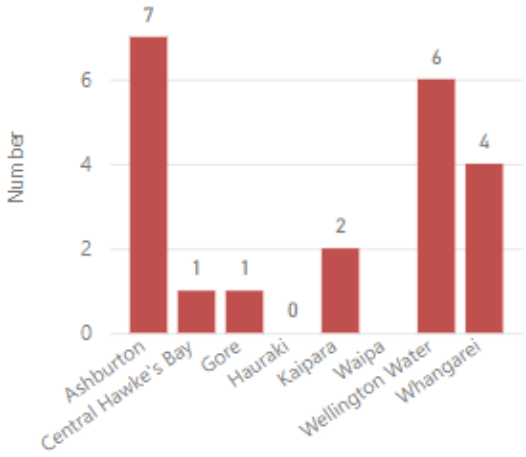
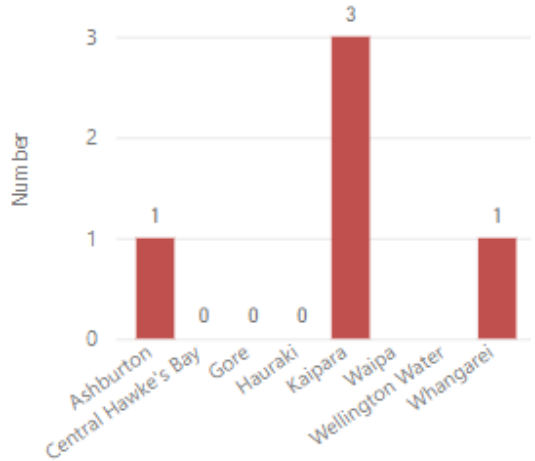
3.0 Audit Findings

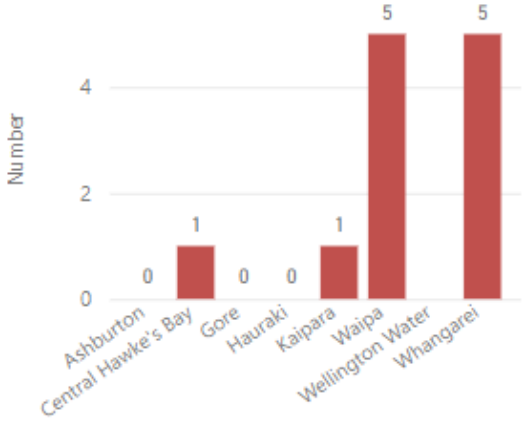
Table 2 Audit Findings

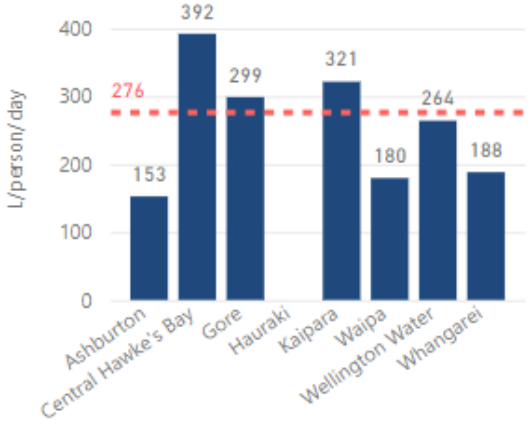
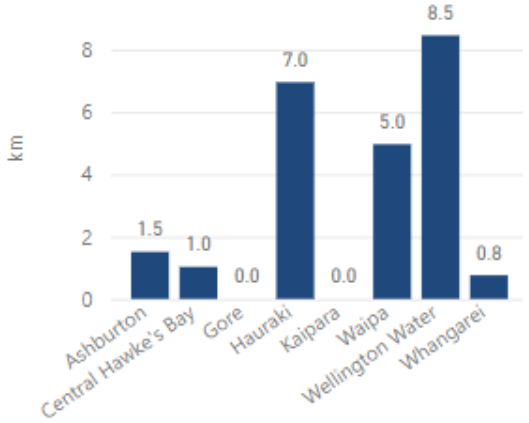
Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
Common		
CB10: Internal staff 	All organisations were easily able to identify the number of staff fully dedicated to the delivery of 3 waters services. The main problem though for a number of organisations was identifying the number of support staff who are not fully dedicated but spend greater than 50% of their time supporting the delivery of 3 waters services. A number of organisations also have support staff who spend less than 50% of their time supporting the delivery of 3 waters services but the definition excludes the counting of these staff.	Several organisations made the suggestion that it would be easier to have a measure that reports the number of staff whose time is fully dedicated solely to 3 waters service delivery. Then have a separate measure for those in supporting roles who only devote part of their time to 3 waters service delivery. We endorse this suggestion but possibly the second measure could be split into two – so maybe have one measure for those who spend less than 100% of their time but more than 50% and another measure for those that spend less than 50% of their time. A useful metric that could come out of this is the ratio of support staff to fulltime staff. If the suggestion is adopted, we recommend the measures be audited next year.

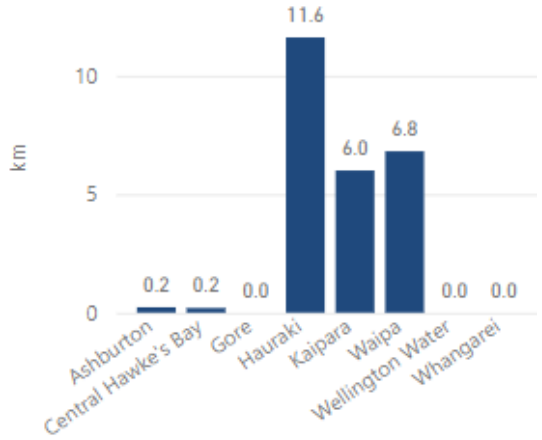
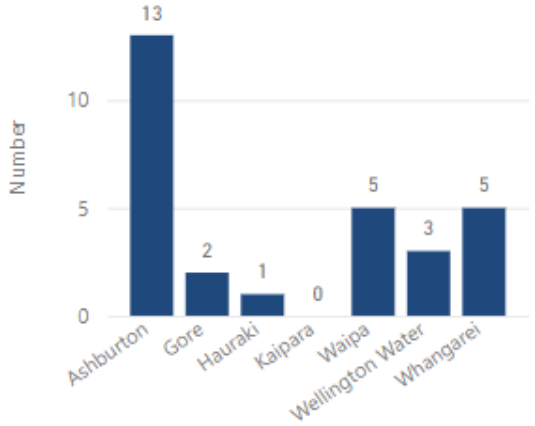
Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
CB14a-1: Staff training hours allocated 	There was a mixed response to this measure. Hauraki and Kaipara were quite specific about the training hours allocated. Whangarei was similarly so but had significantly reduced the allocation due to Covid. Ashburton's data value was a rough estimate and Gore, Waipa and Wellington Water were unable to provide values. Central Hawke's Bay does not allocate set training hours. Overall, it is surprising there is not more mandating of hours allocated for training. No hours for contractors were included. The average data confidence across the five organisations that did provide a rating was "Less Reliable".	As this was a new measure, we suggest it be included in next year's NPR audit so comparisons can be made with a different set of audit participants. We suggest the units displayed in the Units column read – hours/year/staff member just so it is quite clear what type of data value is expected. Some clarity is also needed around what is meant by contractors i.e. does this mean people temporarily backfilling permanent staff positions or people employed by external companies contracted to provide certain services or both.
CB14a-2: Staff training hours undertaken 	The average data confidence across the five organisations that did provide data and a confidence rating, was "Reliable", which was encouraging. In the case of Waipa, they could report the total number of training hours, but it was too difficult to turn this into an hours/year/staff member value. Different types of staff did different amounts of training so an average would have been a misleading representation. Only Central Hawke's Bay's data value includes contractors, which is because the bulk of the service delivery is done by Veolia.	As this was a new measure, we suggest it be included in next year's NPR audit so comparisons can be made with a different set of audit participants. We suggest the units displayed in the Units column read – hours/year/staff member just so it is quite clear what type of data value is expected. See CB14a-1 suggestions/recommendation above about clarity that is needed around what is meant by contractors.

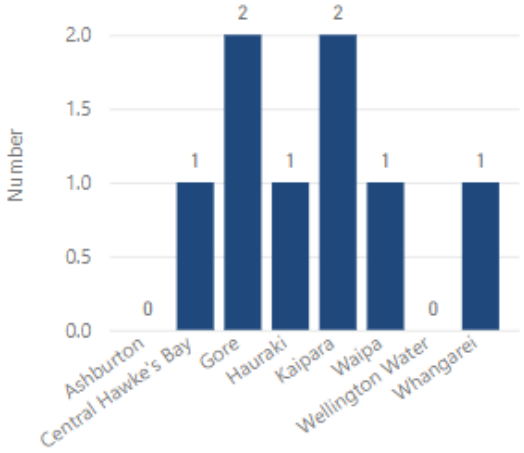
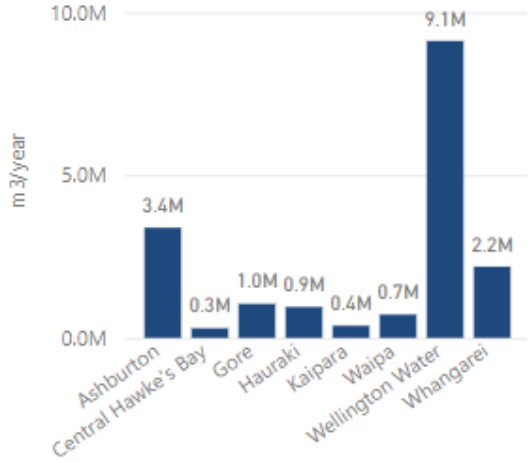
Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
CB14b: Staff training enrolments 	All organisations except for Wellington Water were able to report data values. Of the six organisations that did provide a data confidence rating, the average data confidence was "Reliable". Both Ashburton and Central Hawke's Bay included contractors., although Ashburton was unable to confirm what type of enrolment it was.	We suggest that this measure be audited next year – it dovetails with other suggestions but it is also a useful indicator of how much the industry is investing in the future. With water reform on the horizon there will be an increased need for suitably qualified resources but if those resources are not being trained, the industry is potentially going to have a problem. See CB14a-1 suggestions/recommendation above about clarity that is needed around what is meant by contractors. A number of organisations take on interns through their summer breaks and we wonder if it might be useful to capture these numbers.
CB15a-1: Staff with an engineering degree 	All organisation except for Waipa were able to report data values. We are surprised at some of the low numbers though this is possibly offset by the number of science degrees. Two organisations included contractors and they were Ashburton and Central Hawke's Bay. Ashburton though was unable to confirm what type of degree it was. Other than lack of contractor reporting there were no apparent inconsistencies in the data values being reported.	As this was essentially a new measure this year, we suggest this measure be audited one more year just to ensure that no inconsistencies creep into the reporting. See CB14a-1 suggestions/recommendation above about clarity that is needed around what is meant by contractors.

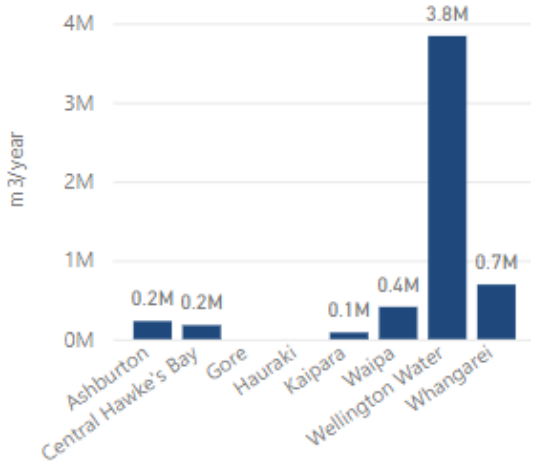
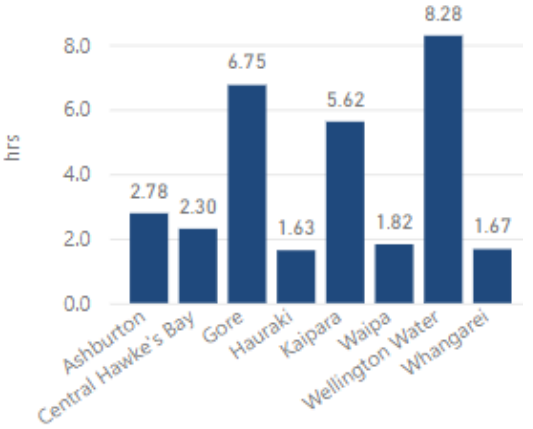
Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
CB15a-2: Staff with a science degree 	All organisation except for Waipa were able to report data values. Only Central Hawke's Bay was able to include contractors. Other than lack of contractor reporting there were no apparent inconsistencies in the data values being reported.	As this was essentially a new measure this year, we suggest this measure be audited one more year just to ensure that no inconsistencies creep into the reporting. See CB14a-1 suggestions/recommendation above about clarity that is needed around what is meant by contractors.
CB15a-3: Staff with another applicable degree 	All organisation except for Waipa and Wellington Water were able to report data values. Only Central Hawke's Bay considered contactors although the data value was zero. Other than lack of contractor reporting there were no apparent inconsistencies in the data values being reported.	As this was essentially a new measure this year, we suggest this measure be audited one more year just to ensure that no inconsistencies creep into the reporting. See CB14a-1 suggestions/recommendation above about clarity that is needed around what is meant by contractors.

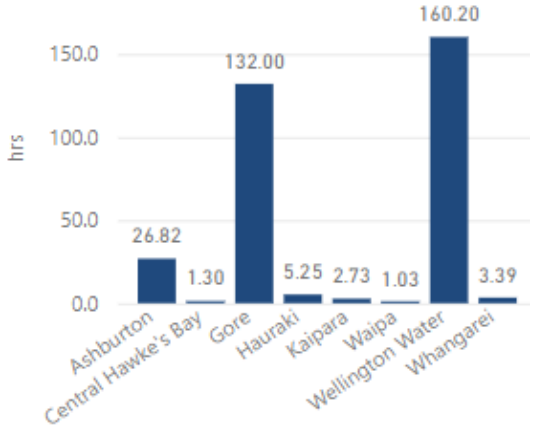
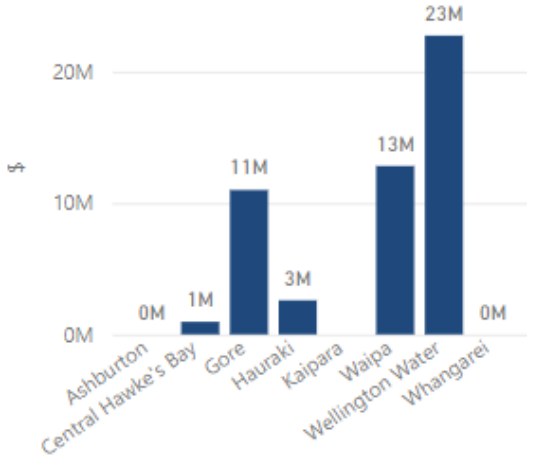
Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
CB16: Continuing professional development enrolments 	The reporting for this measure was a mixed bag. The three organisations that reported zero enrolments do have staff that are required to undertake CPD each year, but those staff track their activity themselves. Of the four organisations that reported data values, three could clearly say what types of enrolment they were. Only Central Hawke's Bay considered contactors.	We suggest that this measure be audited next year as it dovetails with other suggestions. See CB14a-1 suggestions/recommendation above about clarity that is needed around what is meant by contractors.
CB20: Internet of things Ashburton: No Central Hawke's Bay: No Gore: No Hauraki: Yes Kaipara: Yes Waipa: No Wellington Water: No Whangarei: No	As can be seen from this audit sample, there appears to be a low or slow uptake of IoT technology. Interestingly it is two of the smaller – semi rural organisations that have adopted IoT technology. Several organisations did indicate that it may not be clear what is meant by IoT versus SCADA. The average data confidence across the seven organisations that did provide a rating was "Reliable".	As this was a new measure this year, we suggest it be audited next year. It would also be useful to provide an explanation of what constitutes IoT versus what is SCADA. One useful link we provided to some organisations was https://www.3agsystems.com/blog/iot-vs-scada
Water Supply		

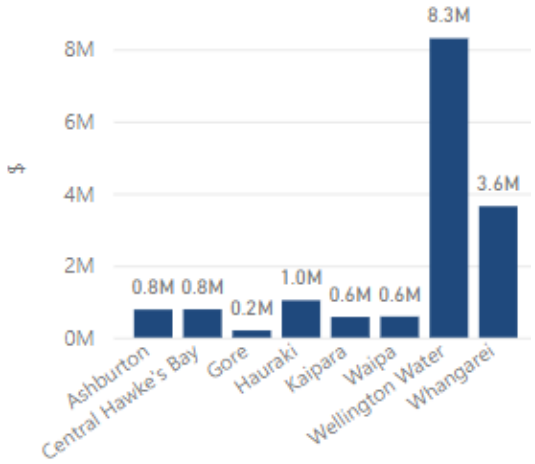
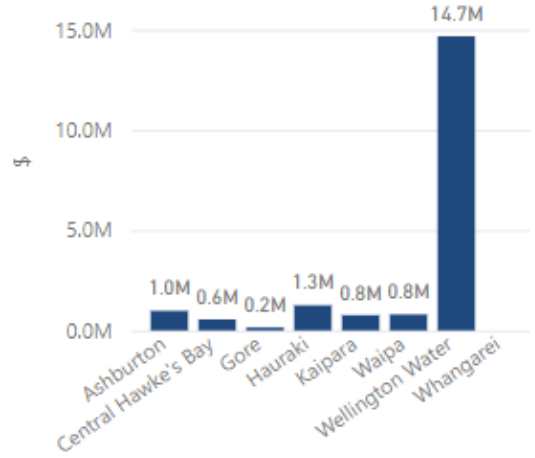
Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
WSB8: Average Daily Residential Water Consumption 	This calculated measure was audited last year and it was recommended that it be kept as an audit measure as it highlights the correctness or otherwise of a range of other contributing data values. This year there were no real data issues and most organisations thought the calculated values were about right or if not, could explain why. A value was not calculated for Hauraki because a data value could not be provided for non-residential consumption which is quite significant. If the calculation was left in this would have produced a grossly inaccurate average daily residential water consumption. The 276 red line value represents the average consumption across all NPR participants in this year's audit.	We recommend that this measure be kept as an audit measure as it is a useful indicator of the correctness or otherwise of a range of other contributing data values.
WSA1b: Length of water mains renewed using internal CAPEX 	All organisations were able to report data values, and all confirmed that vested assets were excluded from consideration. The data confidence across the eight organisations was on average "Reliable" but it could be argued that organisations should be able to report on this measure with a higher level of confidence.	Depending on what the responses look like across the other participating organisations, we suggest this measure not be included in next year's audit.

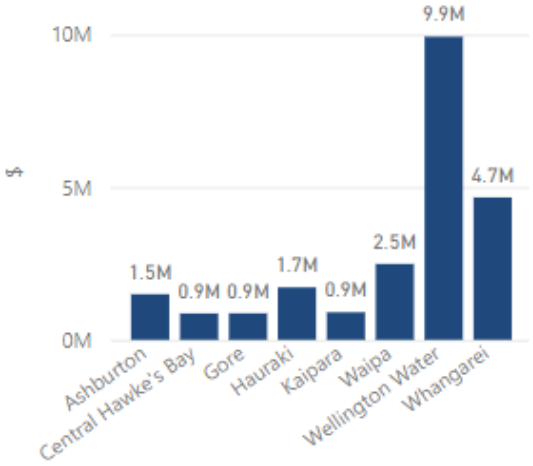
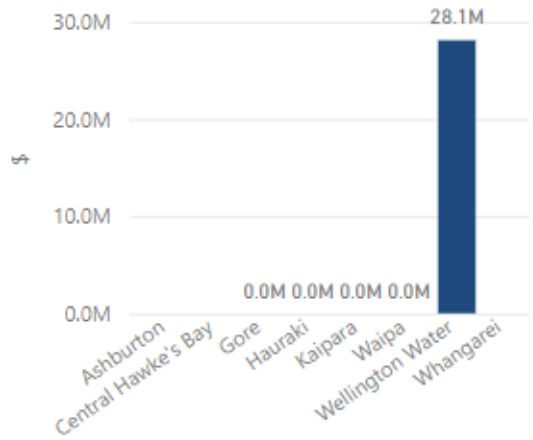
Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
WSA1c: Length of new water mains constructed using internal CAPEX 	Same commentary as for WSA1b above.	Same commentary as for WSA1b above.
WSA4a: Water Treatment Plant Standby Generators 	The outcome of the audit is that all organisations were able to provide data values and for the seven that did provide a data confidence rating, they were all "Highly Reliable". There was some minor confusion with portable generators which can be used at both treatment plants and pump stations i.e. they were being reported twice and there needs to be some clarity around how to deal with this situation. To add to the confusion there is also the potential for portable generators to be used for both water and wastewater. This was not specifically explored in this audit but in hindsight should have been.	We recommend that this measure be included in next year's NPR audit and a focus be placed on the correct allocation and counting of portable generators. Further updating of the Definitions Guide should be considered so it is clear how to count portable generators that can be used at both treatment plants and pump stations, and also for both water and wastewater. Possibly portable generators warrant their own measures.

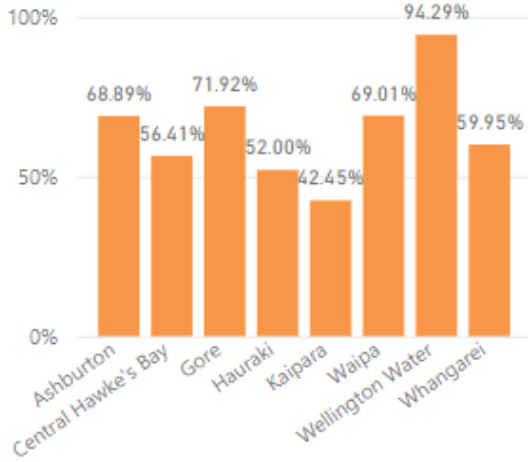
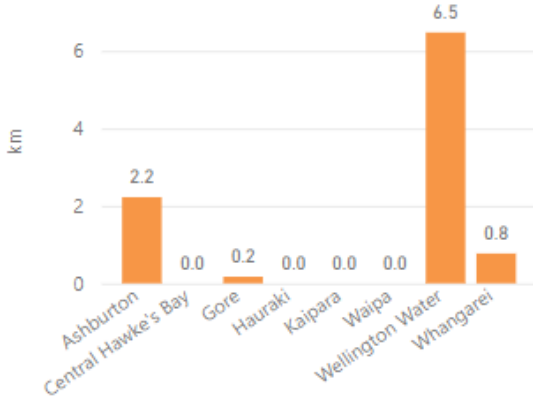
Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
WSA5a: Water Pump Stations Standby Generators 	Same commentary as for WSA4a above the exception being all eight organisations provided a data confidence rating which on average was "Highly Reliable".	Same commentary as for WSA4a above.
WSE1a: Estimated total network water loss 	This measure was audited last year and due to low data confidence, it was recommended that it be audited again this year. While all organisations were able to report data values, the data confidence on average across the eight organisations was "Less Reliable". The losses were also similar to those reported last year. At least one organisation commented that it was not a priority to more accurately assess the loss, which did surprise us, especially with the impending water reform and a focus on climate change and sustainability.	Given the importance of this measure and only a marginal increase in data confidence from last year's audit, we recommend that this measure be included in next year's NPR audit.

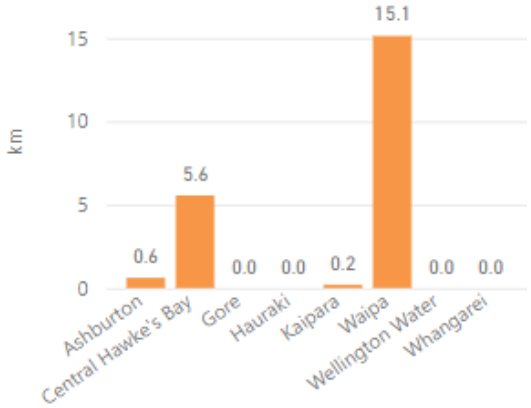
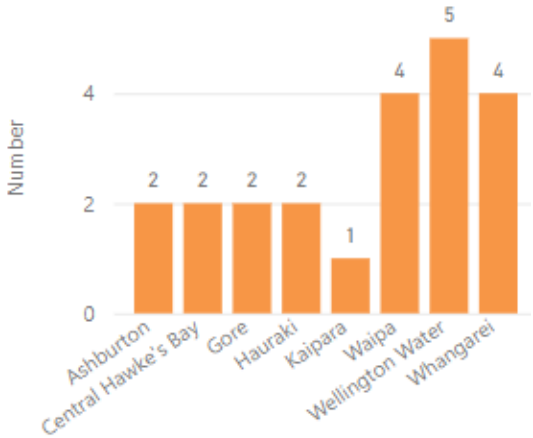
Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
WSE1f: UARL (unavoidable annual real loss) 	This measure was audited last year and due to low data confidence, it was recommended that it be audited again this year. Only two organisations did not calculate UARL, and don't appear to have plans to do so in the future. The average data confidence across the six organisations that did provide a rating was "Less Reliable".	On its own, this measure probably does not warrant inclusion in next year's audit. However, as it dovetails with WSE1a above and if that measure is audited next year, then we recommend that WSE1f be included as well.
WSS10b: Resolution for urgent water supply fault call-outs 	The definition was updated this year to clarify that resolution means return to service and does not necessarily imply surface reinstatement. All but two organisations (Gore and Wellington Water) confirmed that their data values are for return to service. Gore stated that their return to service time would be a bit less than the 6.75hrs reported. The average data confidence across the eight organisations was "Reliable" and no real issues could be identified.	Depending on what the responses look like across the other participating organisations, we suggest this measure not be included in next year's audit.

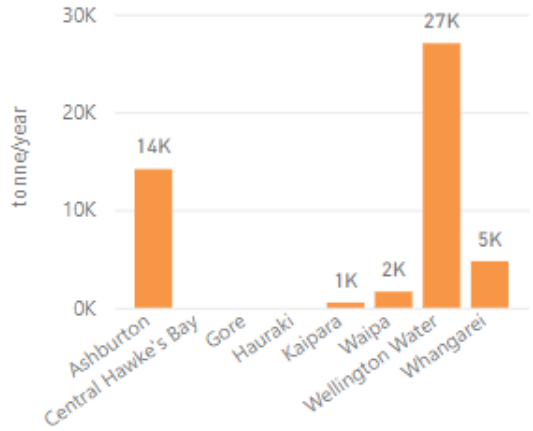
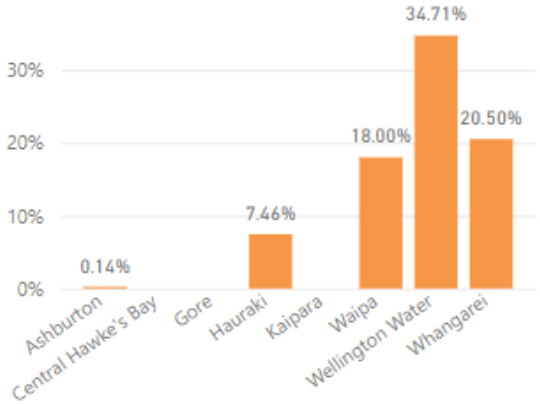
Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
WSS10d: Resolution for non-urgent water supply fault call-outs 	The definition was updated this year to clarify that resolution means return to service and does not necessarily imply asset reinstatement. The audit outcome is similar to WSS10b above. While Gore's data value appears very high, the target resolution time is 14 days, but the actual resolution especially for water leaks can exceed the target due to unavailability of resources. Wellington Water's data value is also high but had reduced significantly from last year (was 215.94hrs). It was noted that for three organisations -Central Hawke's Bay, Kaipara and Waipa, The non-urgent repairs are quicker than the urgent and it would be interesting to understand why.	Depending on what the responses look like across the other participating organisations, we suggest this measure not be included in next year's audit.
WSF6: Debt funding: Water Supply 	This measure was a concern last year, as organisations were initially providing data values that did not represent changes in debt levels. There appeared to be no similar concerns with this year's data values although Hauraki thought there was still more change to come, but this was reflected in their low data confidence. Kaipara know they have debt but are unable to report if there has been a change in debt level. The average data confidence across the seven organisations that did provide a rating was "Reliable".	Depending on what the responses look like across the other participating organisations, we suggest this measure not be included in next year's audit.

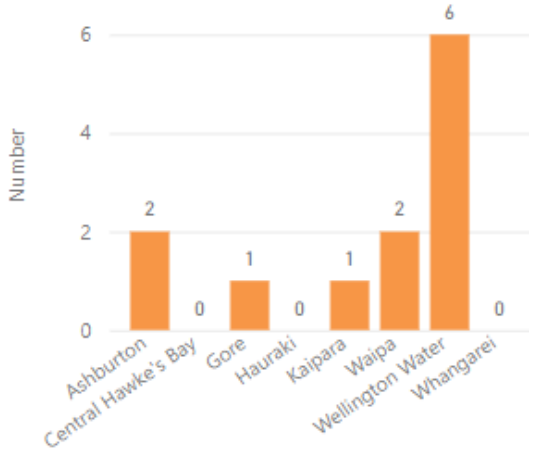
Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
WSF9a: Routine maintenance: Water Supply 	There were no issues with this measure and the average data confidence across all eight organisations was "Reliable". Whangarei's data value represents both routine and reactive maintenance.	Depending on what the responses look like across the other participating organisations, we suggest this measure not be included in next year's audit.
WSF9b: Reactive maintenance: Water Supply 	The only issue with this measure was having to remind Whangarei to report their combined maintenance value against WSF9a. As with WSF9a, the data confidence was on average "Reliable".	Depending on what the responses look like across the other participating organisations, we suggest this measure not be included in next year's audit.

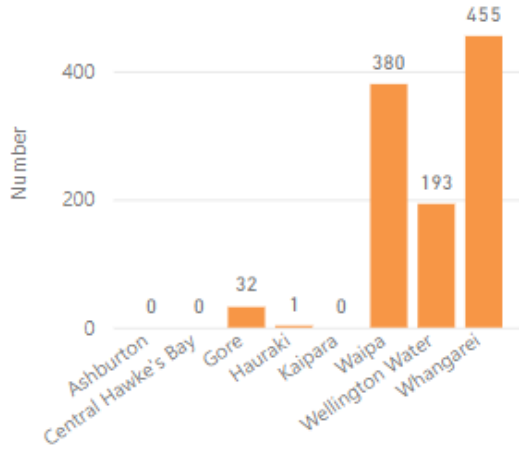
Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
WSF10: Management Costs: Water Supply 	There were no immediate issues identified with this measure and the average data confidence across the eight organisations was "Reliable". When WSF11 was looked at though, it appears some organisations may be including contract management costs in WSF10 instead of reporting them separately, although it may not be easy to separate out those costs in some instances.	There is nothing in this year's audit that suggests the measure should be audited next year. However, it is an easy measure to get wrong and also can be confused with WSF11, so we recommend that this measure be included in next year's NPR audit.
WSF11: Council Contract Management Costs: Water Supply 	Last year there was a certain amount of confusion with this measure and that confusion has continued this year, with only one organisation providing a data value. Gore, Hauraki and Waipa are quite clear in that they do not outsource any maintenance. Ashburton does outsource, but the costs are included in WSF10 and are too hard to separate out. Kaipara do outsource their maintenance but say there are no internal costs for managing the relationship which could be true but seems odd. Whangarei do outsource, and after questioning, did offer a data value but could not confirm if that value was already included in WSF10. Central Hawke's Bay are heavily reliant on Veolia but are unable to separate out the costs.	Effort was made in this year's Definitions Guide with the provision of a table, to try and better explain when data should be reported against this measure as well as WSF9a-b and WSF10 The explanations seem to have somehow got lost in translation and we recommend examples be provided that show the different delivery scenarios and what costs are expected against the different measures. We definitely recommend that this measure be included in next year's NPR audit.

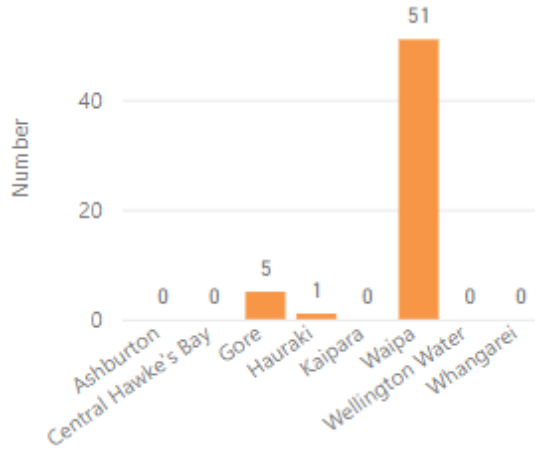
Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
Wastewater		
WWB1b: Wastewater Service Coverage 	There were no issues with this calculated measure. Gore's calculated value did change as a result of a change to the data value for WWB2 – Wastewater Serviced Properties: Residential.	This is a good audit measure to have, as it is a useful sensibility check on other data values. We recommend it be kept as an audit measure.
WWA1b: Length of wastewater mains renewed using internal CAPEX 	All organisations were able to report data values, and except for Wellington Water, all confirmed that vested assets were excluded from consideration. The average data confidence across all eight organisations was "Reliable".	Depending on what the responses look like across the other participating organisations, we suggest this measure not be included in next year's audit.

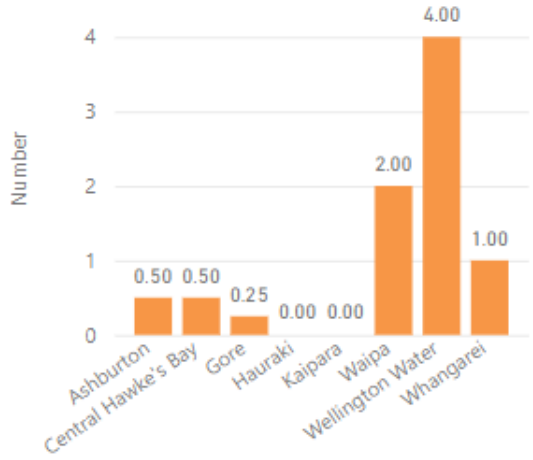
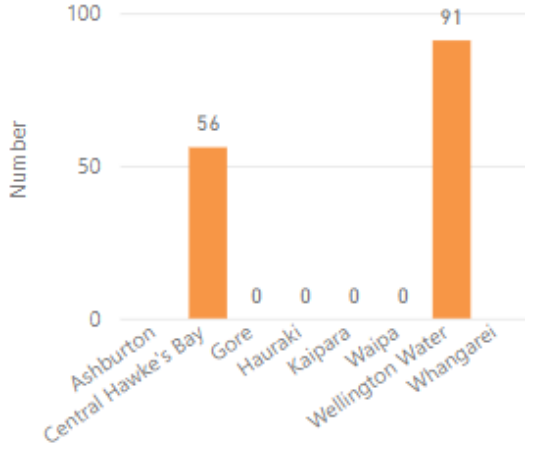
Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
WWA1c: Length of new wastewater mains constructed using internal CAPEX 	Same commentary as for WWA1b above.	Same commentary as for WWA1b above.
WWA5a: Wastewater Pump Stations Standby Generators 	There were no issues identified with this measure and the average data confidence across the seven organisations that did provide a rating was "Highly Reliable". There is the potential for portable generators to be used for both water and wastewater, and this was not specifically explored in this audit, but in hindsight should have been.	We recommend that this measure be included in next year's NPR audit and a focus be placed on the correct allocation and counting of portable generators. Further updating of the Definitions Guide should be considered so it is clear how to count portable generators that can be used at both treatment plants and pump stations and also for both water and wastewater. Possibly portable generators warrant their own measures.

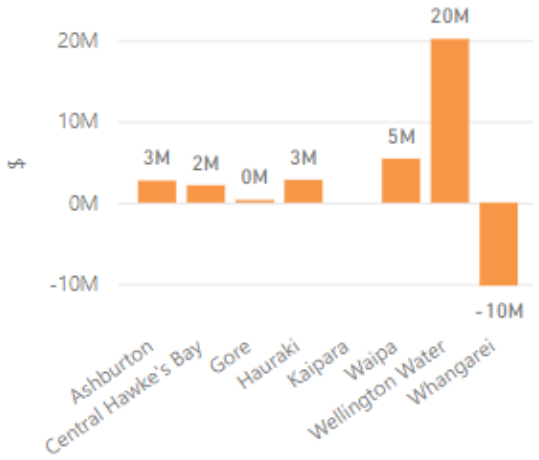
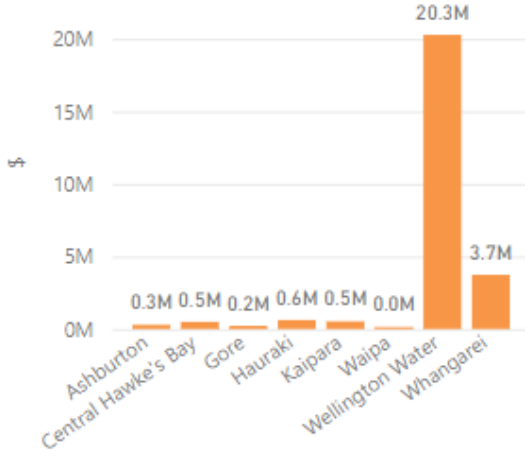
Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
WWA7j-1: Treatment Plant sludge production of wet sludge/biosolids 	Central Hawke's Bay, Gore and Hauraki were unable to report data values for this measure. The average data confidence for the other data values was "Less Reliable". Only two organisations – Ashburton and Wellington Water, made use of the treatment plant columns to record data so that the data value could be automatically calculated. All other values were manually entered.	Due to the generally low data confidence and unavailability of data, we recommend that this measure be included in next year's NPR audit. Use of the treatment plant columns to record tonnes/year should be encouraged.
WWA7j-2: Percentage of dry solids in wastewater sludge/biosolids 	Central Hawke's Bay, Gore and Kaipara were unable to report data values for this measure. The average data confidence for the other data values was "Reliable". Only Wellington Water made use of the treatment plant columns so that data values could be automatically calculated. Ashburton could have, but for some reason the data value was manually entered.	Due to the generally low data confidence and unavailability of data, we recommend that this measure be included in next year's NPR audit. Use of the treatment plant columns to record tonnes/year should be encouraged.

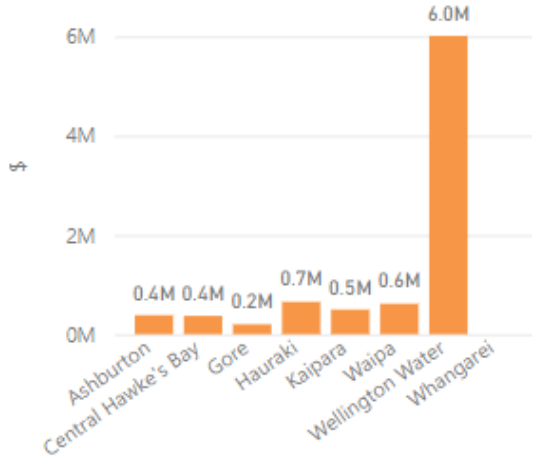
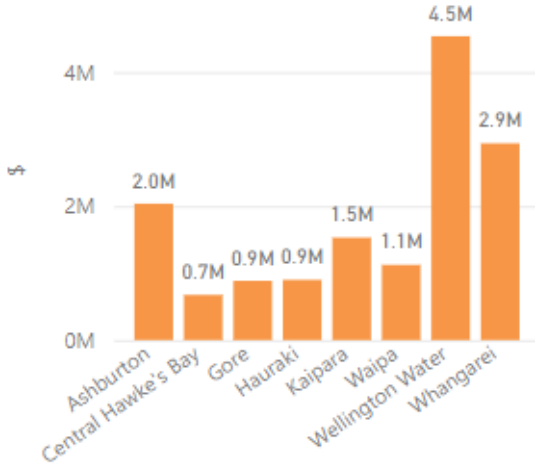
Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
WWA7l: Treatment Plant backup generators 	Same commentary as for WWA5a above.	Same commentary as for WWA5a above.
WWE4g: Wet weather overflow regulation approach Ashburton: No regulatory approach Central Hawke's Bay: Treated as emergency discharge Gore: No regulatory approach Hauraki: No regulatory approach Kaipara: Treated as emergency discharge Waipa: Treated as emergency discharge Wellington Water: Resource consent held for wet weather discharges Whangarei: Resource consent held for wet weather discharges	All organisations were able to respond to this measure, but what was interesting was the level of data confidence expressed which for several organisations was quite low or not stated even when the response was “No regulatory approach”.	Given the apparent uncertainty about what some organisation’s regulatory approach to overflows is, we recommend that this measure be included in next year’s NPR audit.

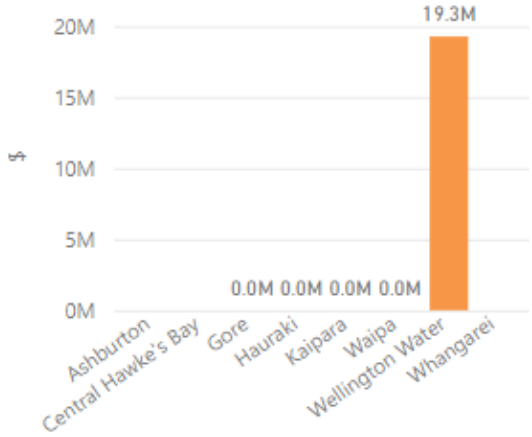
Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
WWE6a: Trade waste bylaw Ashburton Yes Central Hawke's Bay Yes Gore Yes Hauraki Yes Kaipara Yes Waipa Yes Wellington Water Yes Whangarei Yes	This was a new measure this year and pleasingly all audit participants responded that they did have a trade waste bylaw in place.	Depending on what the responses look like across the other participating organisations, we suggest this measure not be included in next year's audit.
WWE6b: Individual trade waste consents 	This was a new measure this year and pleasingly all audit participants responded with a data value even if zero. The average data confidence for the four organisations that did provide a rating was "Reliable" and it would be interesting to see what the data confidence was like across the other NPR participants.	We recommend that this measure be included in next year's NPR audit mainly to further confirm how confident other organisations are in knowing if they have individual trade waste consents and how many they have.

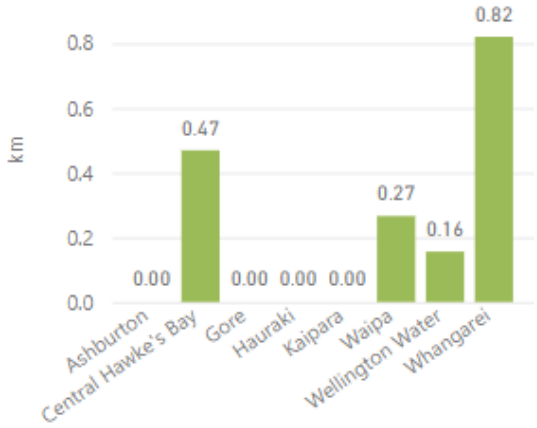
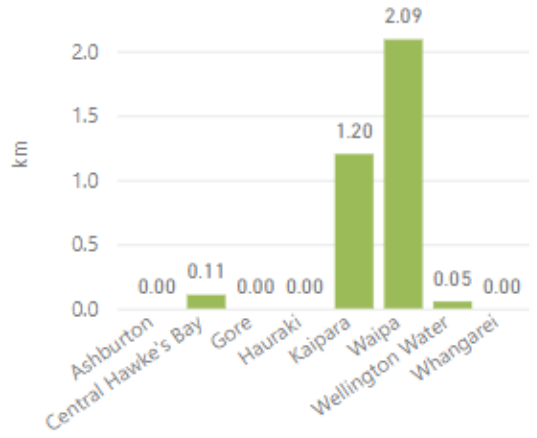
Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
WWE6c: Companies breaching trade waste consents 	This was a new measure this year and pleasingly all audit participants responded with a data value even if zero. Reassuringly organisations who do not have trade waste consents did not report any breaches. The data confidence was on average "Reliable" and those who do have trade waste consents are using some form of database to record and monitor the consents.	If WWE6b is included in next year's NPR audit, we recommend that this measure also be include as it adds a sense check to WWE6b. A useful metric that might be considered is the ratio of breaches to the number of consents held.
WWE6d: Non-compliance actions in response to trade waste breaches Ashburton: N/A Central Hawke's Bay: 0 Gore: Notified of consent breaches and informed further action make be taken if future breaches occur Hauraki: 1 Kaipara: 0 Waipa: Performance management measures Wellington Water: 0 Whangarei: N/A	This was a new measure this year and pleasingly all audit participants responded with a data value, although there was some inconsistency in the values report. The two N/A values can be interpreted as zero actions. The average data confidence across the six organisations that did provide a rating was "Reliable".	If WWE6c is included in next year's NPR audit, we recommend that this measure also be include as it adds a sense check to WWE6c.

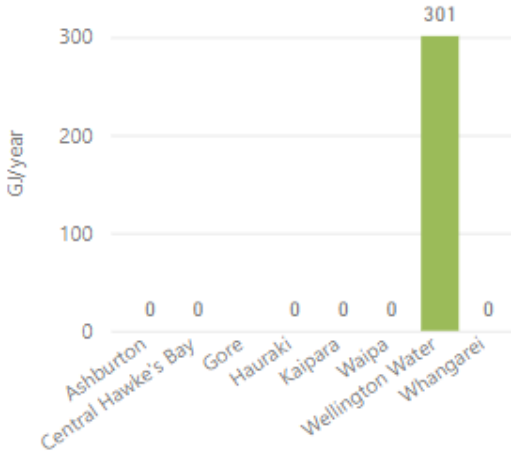
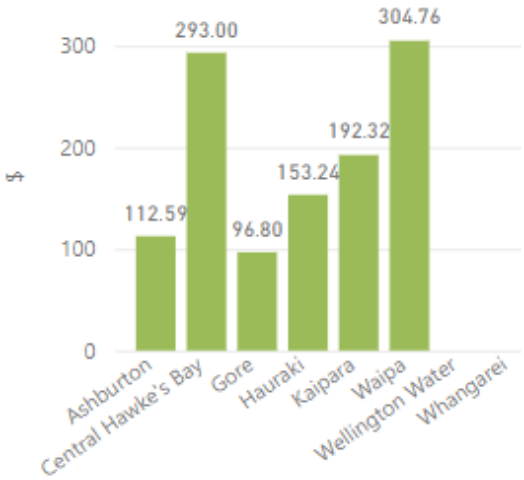
Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
WWE6e: Dedicated trade waste officer(s) on staff 	This was a new measure this year and pleasingly all audit participants responded with a data value even if zero. The average data confidence across the four organisations that did provide a rating was "Reliable".	Depending on what the responses look like across the other participating organisations, we suggest this measure not be included in next year's audit.
WWS4d: The authority's response to issues with its sewerage system 	This was a new measure last year and did cause some problems, hence its inclusion in this year's audit. The definition for this measure was updated this year, and it is now reasonably clear that the measure is asking for the number of complaints about previously reported complaints. The problem appears to be that some organisations systems and processes are either not configured to associate complaints about complaints, or it is difficult to report such numbers. Of the six organisations that did report a data value including the zeros, the average data confidence was "Reliable".	As there still appears to be some confusion about this measure and a lack of confidence even when data values are reported, we recommend that this measure be included in next year's NPR audit.

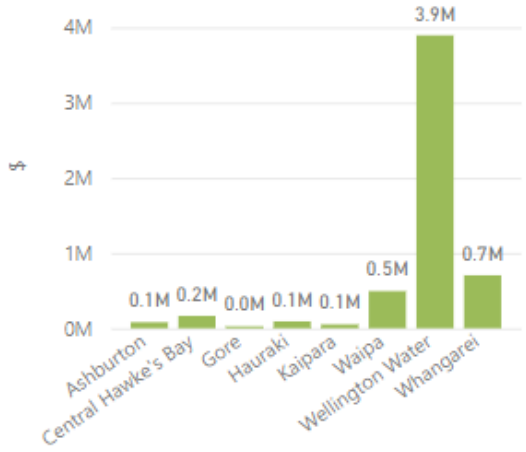
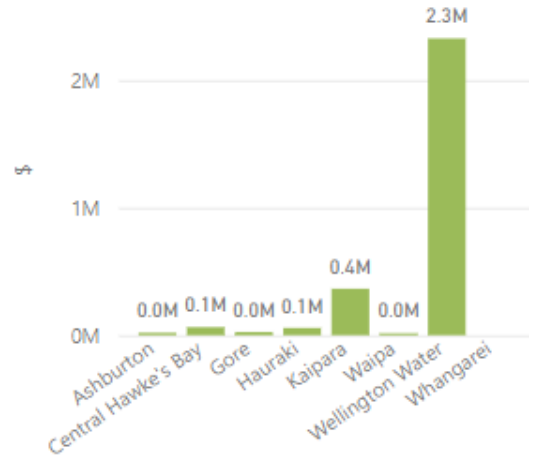
Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
WWF6: Debt funding: Wastewater 	This measure was a concern last year, as organisations were initially providing data values that did not represent changes in debt levels. There appears to be no similar concerns with this year's data values, although Hauraki thought there was still more change to come, but this was reflected in their low data confidence. Kaipara know they have debt but are unable to report if there has been a change in debt level. The average data confidence across the seven organisations that did provide a rating was "Reliable".	Depending on what the responses look like across the other participating organisations, we suggest this measure not be included in next year's audit.
WWF9: Routine Maintenance: Wastewater 	There were no issues with this measure and the average data confidence across all eight organisations was "Reliable". Whangarei's data value represents both routine and reactive maintenance.	Depending on what the responses look like across the other participating organisations, we suggest this measure not be included in next year's audit.

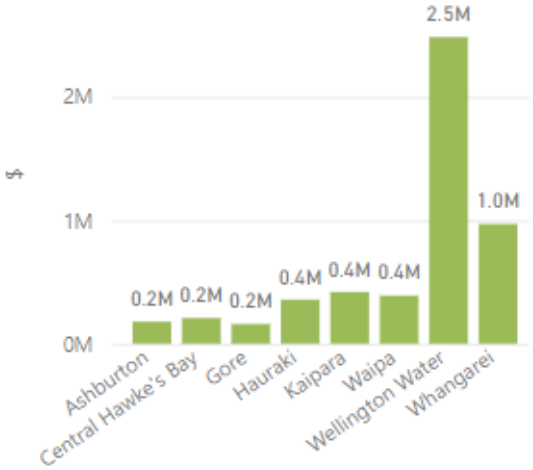
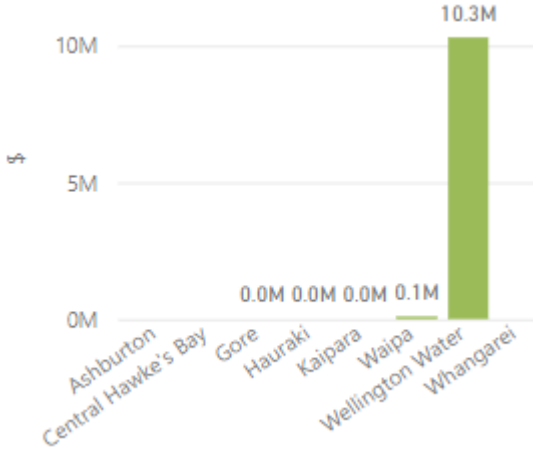
Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
WWF10: Reactive Maintenance: Wastewater 	The only issue with this measure was having to remind Whangarei to report their combined maintenance value against WWF9. As with WWF9, the data confidence was on average "Reliable".	Depending on what the responses look like across the other participating organisations, we suggest this measure not be included in next year's audit.
WWF11: Management Costs: Wastewater 	There were no immediate issues identified with this measure and the data confidence was on average "Reliable". When WWF12 was looked at though, it appears some organisations may be including contract management costs in WWF11 instead of reporting them separately, although it may not be easy to separate out those costs in some instances.	There is nothing in this year's audit that suggests the measure should be audited next year. However, it is an easy measure to get wrong and also can be confused with WWF12 so we recommend that this measure be included in next year's NPR audit.

Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
WWF12: Councils Contract Management Costs: Wastewater 	Last year there was a certain amount of confusion with this measure and that confusion has continued this year. Gore, Hauraki and Waipa are quite clear in that they do not outsource any maintenance although Waipa do use a company for callout work but there is no contract management of this work as such. Ashburton does outsource, but the costs are included in WWF11 and are too hard to separate out. Kaipara do outsource their maintenance but say there are no internal costs for managing the relationship, which could be true but seems odd. Whangarei do outsource and after questioning, did offer a data value but could not confirm if that value was already included in WWF11. Central Hawke's Bay are heavily reliant on Veolia but are unable to separate out the costs.	Effort was made in this year's Definitions Guide with the provision of a table, to try and better explain when data should be reported against this measure as well as WWF9 – 11. The explanations seem to have somehow got lost in translation and we recommend some examples be provided that show the different delivery scenarios and what costs would be expected against the different measures. We definitely recommend that this measure be included in next year's NPR audit.
Stormwater		

Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
SWA1b: Length of stormwater mains renewed using internal CAPEX 	All organisations were able to report data values, and all confirmed that vested assets were excluded from consideration. The average data confidence across all eight organisations was "Reliable".	Depending on what the responses look like across the other participating organisations, we suggest this measure not be included in next year's audit.
SWA1c: Length of new stormwater mains constructed using internal CAPEX 	Same commentary as for SWA1b above.	Same commentary as for SWA1b above.

Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
SWE5: Energy consumption: Stormwater 	Gore was potentially the only other organisation that could have reported a data value, but the energy billing does not separate out the consumption (and cost) for stormwater. It is important to note though that they pay a peppercorn rate for power so the cost is not significant. The other organisations were confident that they either never consumed power on stormwater, or if they did, none was consumed in the reporting year.	Depending on what the responses look like across the other participating organisations, we suggest this measure not be included in next year's audit.
SWS1: Stormwater Charge 	Central Hawke's Bay, Gore and Kaipara were able to report data values with a high level of confidence. The other organisations, with some prompting, were able to provide estimated data values which have a lower level of confidence. Whangarei, however, could not provide any data value, saying it was just too difficult. Wellington Water did provide some data, but it would require interpretation to turn it into a $ value. The average data confidence across the five organisations that did provide a rating was "Reliable".	With some suggestive prompting, organisations do seem to be able to come up with estimated values when there is no specific stormwater charge. The estimated values also appear to be reasonably comparative. It might be useful to include some guidance or worked examples in the Definitions Guide to show acceptable ways of coming up with estimates. The simplest option is to divide SWF1 Operating Revenue) by SWB4 (Total Services Properties) which is how for example, Ashburton's data value was derived. If the Definitions Guide is updated, we recommend that this measure be included in next year's NPR audit.

Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
SWF6a: Routine maintenance: Stormwater 	There were no issues with this measure and the average data confidence was "Reliable". Whangarei's data value represents both routine and reactive maintenance. Gore's data value is very small with most of their costs going to reactive maintenance.	Depending on what the responses look like across the other participating organisations, we suggest this measure not be included in next year's audit.
SWF6b: Reactive maintenance: Stormwater 	The only issue with this measure was having to remind Whangarei to report their combined maintenance value against SWF6a. As with SWF6a, the data confidence was on average "Reliable".	Depending on what the responses look like across the other participating organisations, we suggest this measure not be included in next year's audit.

Measure	Issues, Observations and Commentary on Audit Measures	Suggestions/Recommendations
SWF7: Management Costs: Stormwater 	There were no immediate issues identified with this measure and the data confidence was on average "Reliable". When SWF8 was looked at though, it appears some organisations may be including contract management costs in SWF7 instead of reporting them separately, although it may not be easy to separate out those costs in some instances.	There is nothing in this year's audit that suggests the measure should be audited next year. However, it is an easy measure to get wrong and can be confused with SWF8, so we recommend that this measure be included in next year's NPR audit.
SWF8: Council Contract Management Costs: Stormwater 	Last year there was a certain amount of confusion with this measure and that confusion has continued this year. Gore and Hauraki are quite clear in that they do not outsource whereas Waipa and Wellington Water do outsource and were able to report values for internal costs and supervision. Ashburton does outsource, but the costs are included in SWF7 and are too hard to separate out. Kaipara do outsource their maintenance but say there are no internal costs for managing the relationship, which could be true but seems odd. Whangarei do outsource and after questioning, did offer a data value but could not confirm if that value was already included in SWF7. Central Hawke's Bay are heavily reliant on Veolia but are unable to separate out the costs.	Effort was made in this year's Definitions Guide with the provision of a table, to try and better explain when data should be reported against this measure as well as SWF6a-b and SWF7. The explanations seem to have somehow got lost in translation and we recommend some examples be provided that show the different delivery scenarios and what costs would be expected against the different measures. We definitely recommend that this measure be included in next year's NPR audit.

4.0 Summary

4.1 Audit Process

This year followed the same process as last year, with audits being conducted remotely and using Teams or Zoom to hold online audit meetings. We continued with the approach of asking organisations to respond in writing to a set of audit questions prior to having online meetings. Receiving written answers first still appears to be the most efficient approach, as it allows time to review and understand the answers and then explore them further during the online meetings. This process worked well for seven of the eight organisations – the eighth organisation (Wellington Water) struggled to get engagement from staff to provide written answers and was only able to provide some additional data.

The number of measures audited this year was 50 compared with 49 last year, although other one-off measures were included as well. On average 57 measures were audited per organisation.

4.2 Audit Measures

The pre-defined set of measures that were used for the audit were quite broad. 13 of the 50 measures were repeats from last year's audit. The audit also included a number of new measures, as well as measures where the definition had been updated.

As a result of the audits, a number of data changes (and additions) were made and generally these came about as a result of the audit questions being asked and the subsequent online discussion. Some organisations also made data changes (and additions) to other measures that were not part of the audit. The only organisation that did not make any data changes was Wellington Water and this was because they were unable to go through and answer the audit questions. They did, however, provide some additional data.

In general, all the staff related measures were problematic this year. Organisations seemed to have difficulty counting internal staff who are not fulltime but spend greater than 50% of their time supporting the delivery of 3 waters services. We suggest to separately report fulltime and parttime staff numbers, which we believe organisations would find easier to do.

Staff training and qualifications also proved problematic. The main reason seems to be that organisations don't have good systems for recording the information that the NPR is asking for. The information requested is not unique and other companies, especially engineering consulting companies, have been recording this information for some years. Knowing what qualifications your employees have is in our opinion HR101, but this just doesn't seem to be happening. Adding to this problem is asking organisations to report on contractors, whose data also seems to be unavailable or difficult to get.

Another problem area, as it was last year, was "Council Contract Management Costs…." (WSF11, WWF12 and SWF8). Efforts were made in this year's Guidelines to try and better explain what costs were to be reported where, but the explanations seem to have somehow got lost in translation. As with last year, there is still concern that any management costs reported may also be included in other cost measures so, in effect, a double up may be happening. Part of the problem is that some organisations are not able to easily separate out the different cost components.

As with last year, another key observation was around the organisation's personnel involved in the NPR. A number of people leading or coordinating the NPR this year were doing so for the first time. Consequently, some faced issues, like not being able to understand how some data values were obtained last year and coming up with data values that differed significantly from any previous values provided, or in some instances, not being able to come up with a data value at all. Their situations were compounded by the fact that staff previously involved in the NPR had moved on, and there was no documentation explaining how last year's data had been collected. One audited organisation has committed to documenting their data collection process so there can be repeatability next year. Several organisations also allocated responsibility for the NPR very late in the programme, which not only put pressure on those people but has also caused delays for Water NZ and the auditor.

4.3 Outcomes

As well as a number of data changes and data additions, the NPR audit has resulted in some suggestions/recommendations for Water NZ to consider which are not too onerous. Most of the recommendations relate to whether to continue auditing some of the measures, or not.

The audit measures this year are not considered to be technically challenging and are ones which you would expect most organisations should be able to provide data for. As it was last year, the lack of information on staff training and qualifications is quite surprising and possibly, quite concerning. Assuming the 3-waters reform does happen, the Regulator and the public will be looking for assurances that the new entities will be employing the right people with suitable qualifications, training and a commitment to staying up-to-date with the latest technologies. Consulting companies have been managing this type of information for some years because it is one of the key attributes when selling services, so there should be no reason why local government organisations cannot do the same.

A noticeable trend was that the data confidence was typically higher for measures that related to animate objects i.e. things that can be seen and/or easily counted e.g. standby generators. But when the measuring process is more complex e.g. estimated total network water loss, the data confidence was typically lower. What is not obvious is whether organisations are prioritising the importance of data and doing their best to get accurate data – we have recently seen Auckland Council go through a lengthy period of water restrictions due to low water levels in the dams and in these situations, it becomes very important to understand what the water losses are. The need for accurate information on water demand, use, and management is only going to increase as the impacts of climate change increase.

The NPR is trying to collect and analyse data that is fundamental to organisations understanding their business and being able to efficiently deliver 3 waters services. The audit findings hint that some organisations may struggle to determine or understand if they are delivering 3 waters services efficiently.

4.4 Data Quality

At the conclusion of the audit, and just focusing on the 50 pre-defined measures, the number of missing data values per organisation ranged from a minimum of two values (4%) to a maximum of seven values (14%), with an overall average of five values (10%). Wellington Water was included in this analysis, and if they had been able to respond to the audit questions then potentially they could have reduced their number of missing data values, which would in turn have reduced the overall average slightly. For a performance review of this nature, we believe the overall average should be around 3-4% if not lower, in order to generate the confidence needed when making use of the NPR results.

Similarly the number of corrected data values ranged from a minimum of three values (6%) to a max of 19 values (38%) with an overall average of 17%. Wellington Water was excluded from this analysis as they had not taken up the opportunity to make any corrections. This analysis is slightly biased, as some of the corrections were the population of data that was previously missing and/or more up-to-date data becoming available. The issue though is that if some of these organisations had not been audited, it is possible there would have been no data changes, which would have lessened the data confidence needed when making use of the NPR results. The audit process does seem to generate or facilitate data corrections, which is good from the point of view of those being audited but raises a question about those organisations not being audited. Taking the overall average of 17% corrected data at face value, we believe this is too high and should be around 5%, if not lower, to have confidence in making use of the overall NPR results.

4.5 General Feedback

The general feedback gathered from organisations was quite varied and is summarised as follows:

- Easy to communicate with Water NZ when there were questions. Liked the drop-in sessions.
- NPR is a lot more pleasant than the DIA RFI.
- With water balance reporting, this is quite hard for organisations who supply stock water that has a lot of leakage and is hard to manage.

- Until we get greenhouse emissions staff, unlikely to ever respond to greenhouse gas emissions measures.
- Not sure all the new measures are relevant/applicable as many organisations do things differently.
- Align service request measures with DIA measures.
- Some analysis/reporting of data confidence would be useful i.e. identify who has strong processes and who doesn't.
- A lot of staff movements in the water industry – had made NPR data collection difficult in some cases.
- Covid lockdown and working from home made it difficult when trying to find out who were the right people to contact for certain data.
- Struggled with some of the definitions.
- Person who did the NPR last year has left and there was no documentation on how data was collected.
- Looking at last year's report there seems to be a lot of outliers. It would be better to focus on these and try and get more consistency between organisations rather than keep changing and expanding the NPR. Focus on the measures that are important.
- Could benefit from hand holding through the NPR data collection process
- Some confusion around what/who is a contractor and what the NPR expects.
- Looking forward to doing the NPR again next year if it happens.

5.0 Disclaimer

This report is based on information provided by participating organisations, both in writing and verbally, to address a series of questions asked about a subset of specific measures.

AECOM has used all reasonable endeavours to ensure that the written and verbal responses have been transposed accurately into this report. No responsibility is assumed for any inaccuracies in the transposing by AECOM.

AECOM has not physically verified the information provided by the participating organisations (unless specifically noted otherwise) and we assume no responsibility and make no representations with respect to the adequacy, accuracy or completeness of such information.

AECOM does not accept any liability, whether directly or indirectly, for any liability or loss suffered or incurred by any party placing any reliance on this report, in part or in full. Any party that relies on the detailed findings in Appendix A does so entirely at its own risk.

Appendix A

Detailed Findings

Appendix A Detailed Findings

Note that Red data values in the following tables indicate changes or additions to the original data.

Table 3 Ashburton District Council

Code	Measure	Units	Data	Audit Comments	Audit Response
CB10	Internal staff	FTE	12.3	Was there any difficulty counting/apportioning the number of staff who provide overhead functions but not in a fulltime capacity but greater than 50% of their time? Is there a better way of determining the number of FTE's?	Staff that do overhead functions would be less than 50% of their time on 3 waters so were excluded.
CB14a-1	Staff training hours allocated	hours/year	60	Are the 60hrs/yr/staff member just for ADC staff and not contractors? If "yes" do you know what the contractors hrs/yr allocation to staff is?	The 60 hours is a very rough approximation for ADC staff and based on budget allowance. No specific training hours are allocated for staff members. We never received advice from ACL on their staff training allocation so did not include it.
CB14a-2	Staff training hours undertaken	hours/year		Is there no mechanism especially within ADC for staff (or the organisation) to record their training hours? If people are members of organisations Like Engineering NZ, how do they track the CPD hours needed to maintain their membership?	Rough training time undertaken is recorded by staff members on their Performance Development Reviews. I don't have access to this information. As far as I'm aware no 3 Waters ADC staff are members of Engineering NZ.
CB14b	Staff training enrolments	Number	1	Is the data confidence uncertain because there is no easy way of confirming if staff and contractors are currently enrolled?	Data confidence is uncertain as I never received confirmation on what training ACL staff is enrolled in.
CB15a-1	Staff with an engineering degree	Number	4	Is it easy to confirm the data value especially for contractors?	Easy to confirm ADC - ACL I didn't receive confirmation on qualifications or training so can't update on what was in their contract document.
CB15a-2	Staff with an science degree	Number	7		
CB15a-3	Staff with another applicable degree	Number	1	Is it easy to confirm the data value especially for contractors? What is the other degree the ADC staff member has?	I wasn't able to confirm ACL qualifications as no up-to-date information was provided other than what was in their contract document. The other applicable degree for ADC was Bachelors of Environmental Management.
CB16	Continuing professional development enrolments	Number	0	Is it known what professional organisations staff and contractors are members of? Memberships of certain	As far as I'm aware 3 waters ADC staff aren't members of Professional organisations.

Code	Measure	Units	Data	Audit Comments	Audit Response
				organisations will imply an annual commitment to CPD in order to maintain membership or certification.	
CB20	Internet of things	Yes/No	No	Is there any confusion about IoT versus SCADA?	No - we use cellular and digital radios to transmit data. Not internet
WSB8	Average Daily Residential Water Consumption	L/person/ day	152.5527601	Is the calculated value about what you would expect? It is a reasonable drop from last year's value.	The estimate on non-residential consumption was increased this year to correct the % of water used on Methven Springfield and Montalto supplies for non domestic purposes (see comment in L15). This would have had a flow on effect to reduce the amount of residential water consumption.
WSA1b	Length of water mains renewed using internal CAPEX	km	1.511	How easy is it to differentiate between renewals and new construction - what is the process? Are vested asset excluded from consideration?	Vested assets are excluded from this. Yes easy to distinguish between these two types by using job number/project type this year.
WSA1c	Length of new water mains constructed using internal CAPEX	km	0.229		
WSA4a	Water Treatment Plant Standby Generators	Number	13	2 treatment plants do not have standby generators - is that correct? If portable generators are included in the data value, where are they normally located?	That is correct - 2 TPs don't have generators. The 13 generators are permanent installations.
WSA5a	Water Pump Stations Standby Generators	Number	0	Any portable generators and if so where are they normally located?	ADC only has 1 true pump station that is located in at Treatment plant. This pump station boosts the pressure so during a power outage there isn't a loss of supply, just a reduction in pressure. Is the pump station at one of the treatment plants that has a permanent generator? Yes, but the permanent generator is not used to run the pump station - the reduction in pressure is tolerable.
WSE1a	Estimated total network water loss	m^3/year	3382751	Any plans to more accurately assess what the water losses are?	Some of our water supplies are also stockwater supplies of which one operates on a restrictor basis. While minimum night flow is useful for on-demand supplies it doesn't work too good for stockwater supplies where stock are drinking during the night too.

Code	Measure	Units	Data	Audit Comments	Audit Response
					There are no current plans to try improve this on the stockwater schemes at present.
WSE1f	UARL (unavoidable annual real loss)	m^3/year	228830	Any idea what might have led to the increase from last year?	No. We are planning on installing water meters on all connections on several schemes which will help improve accuracy of water balances.
WSS10b	Resolution for urgent water supply fault call-outs	hrs	2.78	Does the increase from last year seem reasonable?	Small number of complaints (21 compared to last year of 31). Of those 21, 4 did not have a resolution time recorded so a default of 4 hours was used (target time). If those 4 that didn't have the resolution time were excluded in the median calculation, a median of 2.78 hours is calculated (much closer to last years figures). Suggest the value of 2.78 be used. Agree to use of 2.78.
WSS10d	Resolution for non-urgent water supply fault call-outs	hrs	26.82	Okay	
WSF6	Debt funding: Water Supply	$	$0	Was there any reduction of existing loans?	No Any increase? No
WSF9a	Routine maintenance: Water Supply	$	$777,433	Okay	
WSF9b	Reactive maintenance: Water Supply	$	$980,289	Okay	
WSF10	Management Costs: Water Supply	$	$1,494,020	A bit of an increase from last year. Was that expected?	Yes it was expected - lots of increases across the board on management costs contributing to this area.
WSF11	Council Contract Management Costs : Water Supply	$		Are ACL involved in management of the network? If so then costs associated with managing the contract with ACL should be included here if known.	No they aren't involved in management - just operations and management. The CB11 answer says that ADC make the management decisions - where are the associated costs captured - against WSF10? Yes, costs are included in WSF10 - would be too hard to separate out. [have removed the '0']
WWB1b	Wastewater Service Coverage	%	68.89%	Okay	

Code	Measure	Units	Data	Audit Comments	Audit Response
WWA1b	Length of wastewater mains renewed using internal CAPEX	km	2.223	How easy is it to differentiate between renewals and new construction - what is the process? Are vested asset excluded from consideration?	Vested assets area excluded from this. Yes easy to distinguish between these two types by using job number/project type this year.
WWA1c	Length of new wastewater mains constructed using internal CAPEX	km	0.613		
WWA5a	Wastewater Pump Stations Standby Generators	Number	2	Are either of the standby generators portable? If so, where are they normally located?	Both of these is permanent generators.
WWA7j-1	Treatment Plant sludge production of wet sludge/biosolids	tonne/year	14164.97225	Okay	
WWA7j-2	Percentage of dry solids in wastewater sludge/biosolids	%		Can a data value be populated based on an average of the values shown so 0.14%?	Okay put in 0.14% in H39
WWA7l	Treatment Plant backup generators	Number		Okay	
WWE4g	Wet weather overflow regulation approach	Selection	No regulatory approach	Okay	
WWE6a	Trade waste bylaw	Yes/No	Yes	Okay	
WWE6b	Individual trade waste consents	Number	0	Do you have a trade waste database?	Trade Waste properties have information regarding their discharge recorded in the Property and Rating module of Tech1.
WWE6c	Companies breaching trade waste consents	Number	0	How do you know that no one is breaching consent conditions - do you have a trade waste database where this is recorded?	Investigations on any issues identified by maintenance staff are undertaken as required. This record is stored on the Property and Rating module on Tech1.
WWE6d	Non-compliance actions in response to trade waste breaches	Comment	N/A	N/A as in no actions were taken?	Yes
WWE6e	Dedicated trade waste officer(s) on staff	FTE	0.5	Okay	
WWS4d	The authority's response to issues with its sewerage system	Number		If somebody makes a complaint about a previously reported complaint e.g. an overflow and they are not happy with say the clean-up, do you treat that as a new	Ideally additional complaints would be counted as a separate new complaint. In practice I think that they

Code	Measure	Units	Data	Audit Comments	Audit Response
				separate complaint or is it linked to the previous complaint?	may be linked to the initial complaint - I'm not able to quantify this though. Is it maybe better that the '0' is removed then? Agree, remove '0'.
WWF6	Debt funding: Wastewater	$	$2,703,879	Okay	
WWF9	Routine Maintenance: Wastewater	$	$291,543	Okay	
WWF10	Reactive Maintenance: Wastewater	$	$382,664	Quite a drop from last year - any reason for that?	Operations and Maintenance Contract was competitively tendered.
WWF11	Management Costs: Wastewater	$	$2,036,042	A reasonable increase from last year - any reason for that?	Yes it was expected - lots of increases across the board on management costs contributing to this area.
WWF12	Councils Contract Management Costs: Wastewater	$		Are ACL involved in management of the network? If so then costs associated with managing the contract with ACL should be included here if known.	No they aren't involved in management - just operations and management. The CB11 answer says that ADC make the management decisions - where are the associated costs captured - against WWF11? Yes, costs are included in WWF11 - would be too hard to separate out. [have removed the '0']
SWA1b	Length of stormwater mains renewed using internal CAPEX	km	0	How easy is it to differentiate between renewals and new construction - what is the process? Are vested assets excluded from consideration?	Vested assets are excluded. No new pipes or renewed pipes during 20/21 so don't need to distinguish.
SWA1c	Length of new stormwater mains constructed using internal CAPEX	km	0		
SWE5	Energy consumption: Stormwater	GJ/year	0	Okay	
SWS1	Stormwater Charge	$	$112.59	Are you able to provide a median or average value that property owners pay?	As advised in the comments there isn't a "Stormwater only" charge. Stormwater is rated through the Urban amenity rate. This rate covers for stormwater, parks and open space, reserve boards and footpaths. It is based on the capital value of each rating unit. An average or median is not able to be calculated on this basis for the stormwater portion.

Code	Measure	Units	Data	Audit Comments	Audit Response
					It seems an amount gets allocated from the Urban amenity rate take for stormwater which should roughly equal SWF1. If so could you divide SWF1 by the total number of stormwater serviced properties to come up with an approximate charge? Comes to $112.59 if you do this. Agree to $112.59 but with a data confidence of Less Reliable.
SWF6a	Routine maintenance: Stormwater	$	$80,580	Okay	
SWF6b	Reactive maintenance: Stormwater	$	$19,431	Okay	
SWF7	Management Costs: Stormwater	$	$178,760	Okay	
SWF8	Council Contract Management Costs: Stormwater	$		Are ACL involved in management of the network? If so then costs associated with managing the contract with ACL should be included here if known.	No they aren't involved in management - just operations and management. The CB11 answer says that ADC make the management decisions - where are the associated costs captured - against SWF7? Yes, costs are included in SWF7 - would be too hard to separate out. [have removed the '0']

Table 4 Central Hawkes Bay

Code	Measure	Units	Data	Audit Comments	Audit Response
CB10	Internal staff	FTE	7	Was there any difficulty counting/apportioning the number of staff who provide overhead functions but not in a fulltime capacity but greater than 50% of their time? Is there a better way of determining the number of FTE's?	1x Operational, 5x projects - Council staff only. Do you know what the typical % split is between time spend in 3 waters projects versus roading projects? Will discuss in meeting. Based on commentary of the team as a whole spending 70% of time on 3 waters projects, I am counting all FTE in that team. Increased by 1 as the 3 waters manager was not counted originally.
CB14a-1	Staff training hours allocated	hours/year	0		

Code	Measure	Units	Data	Audit Comments	Audit Response
CB14a-2	Staff training hours undertaken	hours/year	33	Do the training hours apply to both Council and Veolia staff?	There is no set training hours allowance. Data is for both council and Veolia staff. Values updated.
CB14b	Staff training enrolments	Number	5	What is the nature of the enrolments?	(Operational: 1x NZ Cert in pipeline maintenance, 1x NZ Cert in Water Treatment) - Projects: PhD, procurement diploma, diploma in QS. Value updated.
CB15a-1	Staff with an engineering degree	Number	1	Is this correct? Unusual to find no one with an engineering degree involved in 3 waters.	(Projects: Bach Eng Tech, NZCE) The 1 NZCE should be added to CB15c below? Correct – moved.
CB15a-2	Staff with an science degree	Number	1	Okay	(Projects: Degree in Zoology, Post gran freshwater ecology)
CB15a-3	Staff with another applicable degree	Number	0	What are the other degrees?	Covered above. Value updated.
CB16	Continuing professional development enrolments	Number	1	What type of CPD is being undertaken?	(Projects: member of Ipwea, Waternz and Project mgmt institute (PMI). Value updated.
CB20	Internet of things	Yes/No	No	Is there any confusion about IoT versus SCADA or are the differences well understood?	We are only utilising out SCADA systems currently. I am using the definition of singular items with direct cellular connections as IOT, rather than what we currently have where we have sites with RTU's and SCADA, despite some being cellular, this is only due to reliability and we have Radio available.
WSB8	Average Daily Residential Water Consumption	L/person/ day	392.00407	The -ve calculated value will have to be ignored as it is incorrect because WSB5 is not populated. If WSB5 cannot be populated, is it possible to provide your own average consumption value? If so, enter a value manually.	WSB5 Updated and this is now populated Is there any knowledge or perception that this figure seems about right? Will discuss in meeting. Yes this seems correct
WSA1b	Length of water mains renewed using internal CAPEX	km	1.028	"How easy is it to differentiate between renewals and new construction - what is the process?	Actual data provided from our projects team on all major installs of new mains and mains that have been

Code	Measure	Units	Data	Audit Comments	Audit Response
WSA1c	Length of new water mains constructed using internal CAPEX	km	0.198	Are vested asset excluded from consideration?"	replaced during the financial year. Separated easily by project. Excludes vested asset
WSA4a	Water Treatment Plant Standby Generators	Number	4	2 treatment plants do not have standby generators - is that correct? Are any of the standby generators portable?	Correct. One plant is a secondary supply and the other is a small supply. We do not keep gensets on hand for these due to available water storage
WSA5a	Water Pump Stations Standby Generators	Number	1	Is the generator permanently installed?	Yes
WSE1a	Estimated total network water loss	m^3/year	295000	Any plans to more accurately assess what the water losses are?	We are looking at installing network metering and carrying out further water loss analysis in the future. The current data is estimated based on current knowledge and available data.
WSE1f	UARL (unavoidable annual real loss)	m^3/year	177828	Are you using the Water Loss Benchmark Spreadsheet?	No, Using our actual data what has UARL calculation
WSS10b	Resolution for urgent water supply fault call-outs	hrs	2.3	Okay	
WSS10d	Resolution for non-urgent water supply fault call-outs	hrs	1.3	Is the value correct? Surprised it is lower than the urgent value.	Value is correct and is the median response time as reported in the annual report
WSF6	Debt funding: Water Supply	$	$959,870	Is this value the total debt or is it the increase in debt since last year? It is supposed to be the latter.	This is to total of debt increased since last year.
WSF9a	Routine maintenance: Water Supply	$	$782,704	Is the uncertainty because of the 30:70 split. Is the split the correct way around?	Have adjusted as when designating the split I was looking at networks only and not treatment as well. There is not split team between reactive/routine so can be hard to separate
WSF9b	Reactive maintenance: Water Supply	$	$555,270		
WSF10	Management Costs: Water Supply	$	$865,000	The data value reported here should just be for council's own internal costs - so salary, office space, IT etc. so a bit confused about the reference to Veolia. Is the delivery of water services 100% outsourced to Veolia and there is no council involvement?	Only including direct council staff here, this is not doubled up in routine/reactive. $89k seems low especially with an internal staff number of 6. Will discuss in meeting. Now includes full overheads (budget) and two staff (3 waters manager + comp officer) and associated costs. Based on a 60% labour split to water.

Code	Measure	Units	Data	Audit Comments	Audit Response
WSF11	Council Contract Management Costs : Water Supply	$		Do council incur any costs in managing the contract with Veolia e.g. is there say a Contract Manager? If so it is those costs which should be reported here. If Veolia is charging a management cost is that included in WSF9a and 9b?	Too difficult to separate
WWB1b	Wastewater Service Coverage	%	56.41%	Okay	
WWA1b	Length of wastewater mains renewed using internal CAPEX	km	0	"How easy is it to differentiate between renewals and new construction - what is the process? Are vested asset excluded from consideration?"	Actual data provided from our projects team on all major installs of new mains and mains that have been replaced during the financial year. Separated easily by project. Excludes vested asset
WWA1c	Length of new wastewater mains constructed using internal CAPEX	km	5.56		
WWA5a	Wastewater Pump Stations Standby Generators	Number	2	Are the 2 generators permanently installed or are they portable?	Permanently installed
WWA7j-1	Treatment Plant sludge production of wet sludge/biosolids	tonne/year		Have removed the zero so there is no misinterpretation.	
WWA7j-2	Percentage of dry solids in wastewater sludge/biosolids	%		Have removed the zero so there is no misinterpretation.	
WWA7l	Treatment Plant backup generators	Number	0	Are there any portable generators that could be used or are generators just not ever needed?	We hire portable generators if required for our smaller plants / WWPS. We only have permanently installed generators currently.
WWE4g	Wet weather overflow regulation approach	Selection	Treated as emergency discharge	There is supposed to be a drop down list of options but it seems to be missing. Can you choose and enter one of the following: - Permitted activity under regional plan - Treated as emergency discharge - Resource consent held for wet weather discharges - Not covered by regulation	Treated as emergency discharge.
WWE6a	Trade waste bylaw	Yes/No	Yes	Okay	
WWE6b	Individual trade waste consents	Number	0	Okay	

Code	Measure	Units	Data	Audit Comments	Audit Response
WWE6c	Companies breaching trade waste consents	Number	0	Okay	
WWE6d	Non-compliance actions in response to trade waste breaches	Comment	0	Okay	
WWE6e	Dedicated trade waste officer(s) on staff	FTE	0.5	Okay	
WWS4d	The authority's response to issues with its sewerage system	Number	56	Has this measure been interpreted correctly? It is supposed to be the number of complaints about previously reported complaints e.g. if a sewer overflow is reported and then someone reports they are not happy with say the clean-up.	Updated data
WWF6	Debt funding: Wastewater	$	$2,143,161	Is this value the total debt or is it the increase in debt since last year? It is supposed to be the latter.	This is increase in debt since last year
WWF9	**Routine Maintenance: Wastewater**	**$**	$493,713	Can the $249,142 be deducted from $373,713 to give just a routine maintenance value?	This is the routine split only, reactive is below. Value updated
WWF10	**Reactive Maintenance: Wastewater**	**$**	$369,142	Okay	Value updated.
WWF11	**Management Costs: Wastewater**	**$**	$674,081	This is just internal council costs?	Only including direct council staff here, this is not doubled up in routine/reactive. $46k seems low especially with an internal staff number of 6. Will discuss in meeting. Now includes full overheads (budget) and two staff (3 waters manager + comp officer) and associated costs. Based on a 30% labour split to wastewater.
WWF12	Councils Contract Management Costs: Wastewater	$		Do council incur any costs in managing the contractor e.g. is there say a Contract Manager? If so it is those costs which should be reported here. If the contractor is charging a management cost is that included in WWF9 and 10?	Too difficult to separate
SWA1b	Length of stormwater mains renewed using internal CAPEX	km	0.469	"How easy is it to differentiate between renewals and new construction - what is the process?	Actual data provided from our projects team on all major installs of new mains and mains that have been

Code	Measure	Units	Data	Audit Comments	Audit Response
SWA1c	Length of new stormwater mains constructed using internal CAPEX	km	0.106	Are vested asset excluded from consideration?"	replaced during the financial year. Separated easily by project. Excludes vested asset
SWE5	Energy consumption: Stormwater	GJ/year	0	Okay	
SWS1	Stormwater Charge	$	293.00	Would it be possible to enter a value that is an average of the targeted rates? If the township sizes are disproportionate then a weighted average would be more accurate.	Value updated.
SWF6a	Routine maintenance: Stormwater	$	$164,800	Can the $33,700 be deducted from $134,800 to give just a routine maintenance value?	This is the routine split only, reactive is below. Value updated
SWF6b	Reactive maintenance: Stormwater	$	$63,700	Okay	Value updated.
SWF7	Management Costs: Stormwater	$	$208,150	This is just internal council costs?	Only including direct council staff here, this is not doubled up in routine/reactive. $11.5k seems low especially with an internal staff number of 6. Will discuss in meeting. Value updated.
SWF8	Council Contract Management Costs: Stormwater	$		Do council incur any costs in managing the contractor e.g. is there say a Contract Manager? If so it is those costs which should be reported here. If the contractor is charging a management cost is that included in SWF6a and 6b?	Too difficult to separate

Table 5 Dunedin City Council

Code	Measure	Units	Data	Audit Comments	Audit Response
CB10	Internal staff	FTE	103.3	Was there any difficulty counting/apportioning the number of staff who provide overhead functions but not in a fulltime capacity but greater than 50% of their time?	

Code	Measure	Units	Data	Audit Comments	Audit Response
				Is there a better way of determining the number of FTE's?	
CB14a-1	Staff training hours allocated	hours/year	436	Hours per staff member was intended for this field. Could these hours be normalised by the number of internal staff, or staff and contractors?	
CB14a-2	Staff training hours undertaken	hours/year	468.4	Hours per staff member was intended for this field. Could these hours be normalised by the number of internal staff, or staff and contractors?	
CB14b	Staff training enrolments	Number	24	Do the data values include both DCC staff and contractors? If contactors are not included, is it easy to get that data?	
CB15a-1	Staff with an engineering degree	Number	14		
CB15a-2	Staff with an science degree	Number	26		
CB15a-3	Staff with another applicable degree	Number	6	Do the data values include both DCC staff and contractors? If contactors are not included, is it easy to get that data? What are the other degrees the 6 people have?	
CB16	Continuing professional development enrolments	Number	22	Does the data value include both DCC staff and contractors? If contactors are not included, is it easy to get that data? What type of CPD is being undertaken?	
CB20	Internet of things	Yes/No	No	Is there any confusion about IoT versus SCADA?	
WSB8	Average Daily Residential Water Consumption	L/person/ day	207.85	Okay	
WSA1b	Length of water mains renewed using internal CAPEX	km	2.516	The units are supposed to be km - is 421.70% actually 4.217km. Please check and correct.	
WSA1c	Length of new water mains constructed using internal CAPEX	km	0.7	Other than the backlog issue, how easy it is to differentiate between renewals and new construction? Are vested assets excluded from consideration?	
WSA4a	Water Treatment Plant Standby Generators	Number	0	Any portable generators and if so where are they normally located?	

Code	Measure	Units	Data	Audit Comments	Audit Response
				If you don't have a portable generator, what do you do if/when there is a power failure?	
WSA5a	Water Pump Stations Standby Generators	Number	0	Any portable generators and if so where are they normally located? If you don't have a portable generator, what do you do if/when there is a power failure?	
WSE1a	Estimated total network water loss	m3/year	4013997	How was the water loss determined? Any idea why it has reduced from last year?	
WSE1f	UARL (unavoidable annual real loss)	m3/year	1622028	How was UARL determined - do you use the Water Loss Benchmark Spreadsheet? Any idea what might have led to the increase from last year?	
WSS10b	Resolution for urgent water supply fault call-outs	hrs	1.87	Okay	
WSS10d	Resolution for non-urgent water supply fault call-outs	hrs	45.48	Okay	
WSF6	Debt funding: Water Supply	$	$0	Debt increased by the amount shown - is that correct?	
WSF9a	Routine maintenance: Water Supply	$	$6,153,295	Are there any plans to try and split the expenditure?	
WSF9b	Reactive maintenance: Water Supply	$	$0		
WSF10	Management Costs: Water Supply	$	$7,216,058	A bit of an increase from last year. Was that expected?	
WSF11	Council Contract Management Costs : Water Supply	$	$0	Is operation and maintenance of the network all done inhouse? If contractors are used then any costs for managing and supervising those relationships should be entered against this measure.	
WWB1b	Wastewater Service Coverage	%	82.05%	Okay	
WWA1b	Length of wastewater mains renewed using internal CAPEX	km	0.74636		

Code	Measure	Units	Data	Audit Comments	Audit Response
WWA1c	Length of new wastewater mains constructed using internal CAPEX	km	0.1155	Why the uncertainty - is there not clear differentiation between renewals and new construction? The lengths seem very small for a large city. Are vested asset excluded from consideration?	
WWA5a	Wastewater Pump Stations Standby Generators	Number	1	Is the 1 standby generator portable? If so, where is it normally located?	
WWA7j-1	Treatment Plant sludge production of wet sludge/biosolids	tonne/year	In Comments	We have aligned values provided in comments field with associated treatment plants in columns M to S. Please confirm we have interpreted correctly. Add the total in the data column.	
WWA7j-2	Percentage of dry solids in wastewater sludge/biosolids	%	In comments	We have aligned values provided in comments field with associated treatment plants in columns M to S. Please confirm we have interpreted correctly. Should the data value be an average so 26%?	
WWA7l	Treatment Plant backup generators	Number	1	We have aligned values provided in comments field with associated treatment plants in columns M to S. Please confirm we have interpreted correctly. There is 1 portable backup generator - is that correct?	
WWE4g	Wet weather overflow regulation approach	Selection	Resource consent held for wet weather discharges	Okay	
WWE6a	Trade waste bylaw	Yes/No	yes	Okay	
WWE6b	Individual trade waste consents	Number	0	Okay	
WWE6c	Companies breaching trade waste consents	Number	37.00	Okay	
WWE6d	Non-compliance actions in response to trade waste breaches	Comment	Increased monitoring + Cost recovery	Okay	

Code	Measure	Units	Data	Audit Comments	Audit Response
WWE6e	Dedicated trade waste officer(s) on staff	FTE	2	Okay	
WWS4d	The authority's response to issues with its sewerage system	Number		If somebody makes a complaint about a previously reported complaint e.g. an overflow and they are not happy with say the clean-up, do you treat that as a new separate complaint or is it linked to the previous complaint?	
WWF6	Debt funding: Wastewater	$	$0	No change in existing debt or is there no debt at all?	
WWF9	Routine Maintenance: Wastewater	$	$5,251,743	Are there any plans to try and split the expenditure?	
WWF10	Reactive Maintenance: Wastewater	$	$0		
WWF11	Management Costs: Wastewater	$	$7,315,735	Okay	
WWF12	Councils Contract Management Costs: Wastewater	$		Is operation and maintenance of the network all done inhouse? If contractors are used then any costs for managing and supervising those relationships should be entered against this measure.	
SWA1b	Length of stormwater mains renewed using internal CAPEX	km	0.06908	Why the uncertainty - is there not clear differentiation between renewals and new construction? Are vested asset excluded from consideration?	
SWA1c	Length of new stormwater mains constructed using internal CAPEX	km	0		
SWE5	Energy consumption: Stormwater	GJ/year	287	Okay	
SWS1	Stormwater Charge	$		How is the stormwater activity funded - presumably through rates? If so, are you able to provide a median or average value that property owners pay?	
SWF6a	Routine maintenance: Stormwater	$	$698,092	Are there any plans to try and split the expenditure?	

Code	Measure	Units	Data	Audit Comments	Audit Response
SWF6b	Reactive maintenance: Stormwater	$	$0		
SWF7	Management Costs: Stormwater	$	$2,753,619	Okay	
SWF8	Council Contract Management Costs: Stormwater	$	$0	Is operation and maintenance of the network all done inhouse? If contractors are used then any costs for managing and supervising those relationships should be entered against this measure.	

Table 6 Gore District Council

Code	Measure	Units	Data	Audit Comments	Audit Response
CB10	Internal staff	FTE	13	Was there any difficulty counting/apportioning the number of staff who provide overhead functions but not in a fulltime capacity but greater than 50% of their time? Is there a better way of determining the number of FTE's?	No issues with this.
CB14a-1	Staff training hours allocated	hours/year		Is there a training budget that could be turned into an hrs/yr/staff number based on an average hourly rate?	Our training budget is only for external costs so not really.
CB14a-2	Staff training hours undertaken	hours/year		Would the training records not record this data? If people are members of organisations Like Engineering NZ, how do they track the CPD hours needed to maintain their membership?	Training records only record what licences/ certificates/ training each individual holds and expiration dates e.g. first aid certificate, Vehicle licence, traffic management
CB14b	Staff training enrolments	Number	2	What is the nature of the enrolments? Will help with the CB16 clarification.	Two operators currently enrolled in level 4 reticulation certificate.
CB15a-1	Staff with an engineering degree	Number	1	Okay	
CB15a-2	Staff with an science degree	Number	1	Okay	
CB15a-3	Staff with another applicable degree	Number	0	What is the other degree the GDC staff member has?	This is an error and should have been 0. Do you mean the 1 should be a zero? Yes

Code	Measure	Units	Data	Audit Comments	Audit Response
CB16	Continuing professional development enrolments	Number	0	Is it known what professional organisations staff are members of? Memberships of certain organisations will imply an annual commitment to CPD in order to maintain membership or certification.	We have memberships with WIOG, Water NZ, IPWEA, Engineering NZ So with say those who are members of Engineering NZ, how are they accounting for the 40hrs/yr of CPD that is required? Not being recorded.
CB20	Internet of things	Yes/No	No	Is there any confusion about IoT versus SCADA?	Possibly - if SCADA is considered IoT then we do have it- This is quite a broad question/ not sure that there is much value in asking this question and perhaps it would be better to be more specific. There probably needs to be some background explanation on what is considered IoT versus what is considered SCADA. If interested, see https://www.3agsystems.com/blog/iot-vs-scada
WSB8	Average Daily Residential Water Consumption	L/person/ day	298.7903316	Is the calculated value about what you would expect? A bit of an increase on last year's value.	The reason for the change is an error in last year's water service population value - yes it seems about correct. Calculated value changed.
WSA1b	Length of water mains renewed using internal CAPEX	km	0	How easy it is to differentiate between renewals and new construction - what is the process? Are vested asset excluded from consideration?	Newly constructed mains are not included in this but are included in WSA1c - Yes vested assets are not included here/ we haven't had any vested assets in the past 12 months. What enables the identification of renewals - is there a different budget code from new water mains? Yes, different budget codes. There is little growth in the district.
WSA1c	Length of new water mains constructed using internal CAPEX	km	0		
WSA4a	Water Treatment Plant Standby Generators	Number	2	2 treatment plants do not have standby generators - is that correct? Are either of the standby generators portable? If so, where are they normally located?	Stand by generators are permanently located at both Gore treatment sites (Hilbre & Wentworth St). Hilbre standby generator is for reticulation only, in the event of a power outage all treatment stops. Wentworth St backup generator can run the entire treatment plant.

Code	Measure	Units	Data	Audit Comments	Audit Response
WSA5a	Water Pump Stations Standby Generators	Number	2	Is the 1 standby generator portable? If so, where is it normally located?	No, permanently located at Coopers Wells field - we do however have a fully portable generator located at our yard that we can use at less critical sites as required. Can the data value be 2 then? Yes 2, but one can be used anywhere.
WSE1a	Estimated total network water loss	m^3/year	1044545.021	Any plans to more accurately assess what the water losses are?	Not seen as a priority in the immediate future but would like to gain a better understanding at some stage.
WSE1f	UARL (unavoidable annual real loss)	m^3/year		Do you not use the Water Loss Benchmark Spreadsheet?	No
WSS10b	Resolution for urgent water supply fault call-outs	hrs	6.75	Quite an increase from last year - does this seem reasonable?	Yes, there was a reporting issue with last years values - we have improved our processes over the past 12 months and the latest value is a more accurate reflection of what is actually happening. Does the 6.75 just represent return to service or is it complete resolution including say reinstatement? 6.75 represents the time when the job is finished which may include reinstatement. The return to service time is probably a bit less.
WSS10d	Resolution for non-urgent water supply fault call-outs	hrs	132	Is the data value correct? It only has to include permanent return to service and not reinstatement as well.	Review suggests this value should be 132 hours. As above there were issues with our reporting system hence the large increase from last year. Our median resolution time for non-urgent requests was 5.5 days with our target being 14 days - Note our understanding is that Non urgent call-outs include leaks etc which we don't always have the resources to repair immediately. So the data value can be changed to 132? Yes
WSF6	Debt funding: Water Supply	$	$10,991,324	Is the data value shown the total debt or change in debt? Just need the change in debt from last year to this year.	Unable to answer? This is an increase in debt.
WSF9a	Routine maintenance: Water Supply	$	$197,817	Okay	

Code	Measure	Units	Data	Audit Comments	Audit Response
WSF9b	Reactive maintenance: Water Supply	$	$150,086	Okay	
WSF10	Management Costs: Water Supply	$	$869,273	Okay	
WSF11	Council Contract Management Costs : Water Supply	$	$0	Does GDC have its own inhouse workforce i.e. nothing is outsourced?	GDC has its own inhouse workforce to manage potable water.
WWB1b	Wastewater Service Coverage	%	71.92%	Okay	Calculated value changed.
WWA1b	Length of wastewater mains renewed using internal CAPEX	km	0.17	How easy it is to differentiate between renewals and new construction - what is the process? Are vested assets excluded from consideration?	Only renewal of mains included in this - we very rarely construct new mains or have mains vested into Council ownership.
WWA1c	Length of new wastewater mains constructed using internal CAPEX	km	0		
WWA5a	Wastewater Pump Stations Standby Generators	Number	2	Are either of the standby generators portable? If so, where are they normally located?	No - we however have a fully portable generator that can be used at less critical sites and can hire additional portable generators as required. Is this the same portable generator mentioned in the water tab? Yes, it can be used anywhere.
WWA7j-1	Treatment Plant sludge production of wet sludge/biosolids	tonne/year		Assuming there is sludge production, is the information unavailable?	Yes would need to do significant additional work to obtain an accurate value for this.
WWA7j-2	Percentage of dry solids in wastewater sludge/biosolids	%			
WWA7l	Treatment Plant backup generators	Number	1	No portable generators - is that correct?	Remaining two wastewater plants are oxidation ponds/ wetlands, portable generators not necessary. One portable generator for the council, reported under potable water tab. Data value populated.
WWE4g	Wet weather overflow regulation approach	Selection	No regulatory approach	Are discharges not covered by regulation or operating without consent?	Currently the regional plan prohibits wastewater overflows so a consent cannot be obtained - under the proposed new regional plan there will be the ability to

Code	Measure	Units	Data	Audit Comments	Audit Response
					consent overflows so once this plan is fully operational we will begin the process of applying for a consent.
WWE6a	Trade waste bylaw	Yes/No	Yes	Okay	
WWE6b	Individual trade waste consents	Number	32	Okay	
WWE6c	Companies breaching trade waste consents	Number	5.00	Okay	
WWE6d	Non-compliance actions in response to trade waste breaches	Comment	Notified of consent breaches and informed further action make be taken if future breaches occur	Okay	
WWE6e	Dedicated trade waste officer(s) on staff	FTE	0.25	Okay	
WWS4d	The authority's response to issues with its sewerage system	Number	0	Can your CRM link and report on complaints about previous complaints?	Yes, multiple CRMs can be linked for various reasons e.g. multiple reports on same issue, linking water shutdowns to jobs and sequential CRMs for the same task.
WWF6	Debt funding: Wastewater	$	$329,297	Is the data value shown the increased change in debt?	Yes, this is the amount of new debt funding for wastewater budgeted for 20/21.
WWF9	Routine Maintenance: Wastewater	$	$221,139	Okay	
WWF10	Reactive Maintenance: Wastewater	$	$199,882	Okay	
WWF11	Management Costs: Wastewater	$	$884,506	A reasonable increase from last year - was that expected?	The increase was not fully expected with chemical costs increasing significantly, along with expenditure related to the Stimulus package.

Code	Measure	Units	Data	Audit Comments	Audit Response
WWF12	Councils Contract Management Costs: Wastewater	$	$0	Does GDC have its own inhouse workforce i.e. nothing is outsourced?	The increase was not fully expected with chemical costs increasing significantly, along with expenditure related to the Stimulus package.
SWA1b	Length of stormwater mains renewed using internal CAPEX	km	0	How easy it is to differentiate between renewals and new construction? Are vested assets excluded from consideration?	We very rarely construct new mains or have mains vested into Council ownership so not very difficult especially being the value is 0.
SWA1c	Length of new stormwater mains constructed using internal CAPEX	km	0		
SWE5	Energy consumption: Stormwater	GJ/year		Can the power consumed by the 4 pump stations not be separately identified?	Data not available? The energy billing is all combined so would be difficult to separate out stormwater. GDC also pay a peppercorn rate for power so it is not a significant cost.
SWS1	Stormwater Charge	$	96.80	It seems that last year's value was the combined valued - is that correct?	Yes, they were combined.
SWF6a	Routine maintenance: Stormwater	$	$327	Is $327 correct? Please check. It looks like reactive and routine maintenance was reported together last year. Is that correct? If so, the combined total this year is lower than last year - was that expected?	Are you able to check? The $327 is correct.
SWF6b	Reactive maintenance: Stormwater	$	$25,489		
SWF7	Management Costs: Stormwater	$	$159,556	A reasonable drop from last year – was this expected?	Yes they were combined. The 2019/2020 reporting period had the February 2020 Southland flooding event which contributed to the greater cost than what was used during the 2020-2021 reporting period.
SWF8	Council Contract Management Costs: Stormwater	$	$0	Does GDC have its own inhouse workforce i.e. nothing is outsourced?	GDC has its own inhouse workforce to manage stormwater.

Table 7 Hauraki District Council

Code	Measure	Units	Data	Audit Comments	Audit Response
CB10	Internal staff	FTE	24.5	Was there any difficulty counting/apportioning the number of staff who provide overhead functions but not	Yes it was difficult. It would be easier to report on staff doing 100% in 3Waters space and having a separate field to estimate numbers for those indirectly involved. The reduction is related to interpretation. In previous

Code	Measure	Units	Data	Audit Comments	Audit Response
				in a fulltime capacity but greater than 50% of their time? Is there a better way of determining the number of FTE's? Any reason for the reduction?	years we have tallied the total staff in a department (i.e. if 2 staff spend 25% of their time , we counted that as .5 staff) This year, after clarifying with Lesley, we did not count any staff spending less than 50% regardless of how many in that team are spending their time on 3waters business support. Good suggestion about having a separate field for staff indirectly involved. It should be relatively easy for most councils to provide just a straight count but gets less easy if trying to turn that count into an FTE number.
CB14a-1	Staff training hours allocated	hours/year	90	Okay. Applaud the 90 hrs	This is a directive and is reviewed in individuals annual performance review.
CB14a-2	Staff training hours undertaken	hours/year	37	Is the data confidence less reliable because there may not be consistent recording of the training hours undertaken? It does appear though that staff are not using anywhere near their allocated hours - any reasons why?	It is less reliable because our a) recording system is self-managed (i.e. may not be accurate) and b) We had to work out an average estimate based on numbers in the CB10. If we based the average on those spending 100% on3Waters only, the average training hours would be much higher.
CB14b	Staff training enrolments	Number	7	Do the data values include contractors?	No
CB15a-1	Staff with an engineering degree	Number	3		
CB15a-2	Staff with an science degree	Number	0		
CB15a-3	Staff with another applicable degree	Number	0		
CB16	Continuing professional development enrolments	Number	0	Is it known what professional organisations staff are members of? Memberships of certain organisations will imply an annual commitment to CPD in order to maintain membership or certification.	Can confirm membership to organisations if this information is required, but none of the memberships have a development programme or a CPD requirement. If not too difficult, add the types of memberships in the comments field. This could be a topic for a new measure as it is an area of interest with the water reform.
CB20	Internet of things	Yes/No	Yes	Okay	

Code	Measure	Units	Data	Audit Comments	Audit Response
WSB8	Average Daily Residential Water Consumption	L/person/ day		Have removed residential consumption information as it is meaningless without the non-residential breakdown. Is it possible to provide your own average consumption value? If so, enter a value manually.	HDC is predominantly an agricultural water supplier. The difference between residential and non-residential consumption is significant and an average would therefore be grossly inaccurate.
WSA1b	Length of water mains renewed using internal CAPEX	km	6.953	How easy is it to differentiate between renewals and new construction - what is the process? A reasonable increase in newly constructed water mains this year - was there a new development? Are vested asset excluded from consideration?	We can but It is not easy to differentiate between renewals and new construction in the Asset Management System (AssetFinda). A major new water main was installed from Paeroa to Kaimanawa. Vested assets are excluded. How was the differentiation between renewals and new construction done then - was it a case of having to look at each pipe and decide? If so then it is fair to say the data confidence is highly reliable? Renewals are identified by the fact that old pipe is decommissioned which can be observed spatially.
WSA1c	Length of new water mains constructed using internal CAPEX	km	11.614		
WSA4a	Water Treatment Plant Standby Generators	Number	1	3 treatment plants do not have standby generators - is that correct? Is the 1 generator portable and if so, where is it normally located?	Correct: Only Kerepehi WTP has a generator. It is on a trailer, so can be moved, but is hard-wired into Kerepehi so needs an electrician to disconnect it and a truck to tow it.
WSA5a	Water Pump Stations Standby Generators	Number	1	Are either of the standby generators portable? If so, where are they normally located?	One generator is mentioned above. The other is not portable. Located at the Mackaytown Pumpstation Reservoir. Does the data value of 2 include the 1 generator above at Kerepehi WTP? If so then the data value should be 1. Data value changed.
WSE1a	Estimated total network water loss	m^3/year	948867.389588534	Is this correct? It is an enormous reduction from last year (and much lower than most % leakage rates in NZ)	Have double checked the figures, number was slightly off. But not a huge change, please note that Water loss is calculated by taking the total production – total sales to get the unaccounted for water. The unaccounted for volume is then divided by total production. Please note that meter/ sales data is only collected 6 monthly for average water meters. The assumption is that average daily use for that 6 month period is consistent for the

Code	Measure	Units	Data	Audit Comments	Audit Response
					annual use and that some years will be overstated and others will be understated. This is why we have noted a low level of confidence in the data "Less reliable". Do you know if there has been any active work done to reduce network losses? We have invested in audio leak detection equipment, we are installing bulk meters in Waihi to create zones in which we can identify problem areas as well as our renewal programme as stated in the AMP. Data value changed.
WSE1f	UARL (unavoidable annual real loss)	m^3/year		Do you not use the Water Loss Benchmark Spreadsheet?	No
WSS10b	Resolution for urgent water supply fault call-outs	hrs	1.633333334	Okay	
WSS10d	Resolution for non-urgent water supply fault call-outs	hrs	5.25	Okay	
WSF6	Debt funding: Water Supply	$	$2,596,072	Is the data value shown the total debt or change in debt? Just need the change in debt from last year to this year.	Change in debt only, but consider that some entries was not posted on submission date. This value would now have changed following postings done. (NB) Okay, so last year's value updated.
WSF9a	Routine maintenance: Water Supply	$	$1,032,089	Quite an increase from last year - any reason for that?	Last year values ($695k) was reposted as they were not all inclusive. (NB) Okay, so last year's value updated.
WSF9b	Reactive maintenance: Water Supply	$	$1,254,562	Okay	
WSF10	Management Costs: Water Supply	$	$1,718,941	A bit of an increase from last year. Was that expected?	Last year values ($1,736k) was reposted as they were not all inclusive. (NB) Okay, so last year's value updated.
WSF11	Council Contract Management Costs : Water Supply	$	$0	Okay	
WWB1b	Wastewater Service Coverage	%	52.00%	Okay	

Code	Measure	Units	Data	Audit Comments	Audit Response
WWA1b	Length of wastewater mains renewed using internal CAPEX	km	0	How easy is it to differentiate between renewals and new construction - what is the process? Are vested assets excluded from consideration?	We can but It is not easy to differentiate between renewals and new construction in the Asset Management System (AssetFinda). Vested assets are excluded. How was the differentiation between renewals and new construction done then - was it a case of having to look at each pipe and decide? If so then it is fair to say the data confidence is highly reliable? Renewals are identified by the fact that old pipe is decommissioned which can be observed spatially.
WWA1c	Length of new wastewater mains constructed using internal CAPEX	km	0		
WWA5a	Wastewater Pump Stations Standby Generators	Number	2	Are either of the standby generators portable? If so, where are they normally located?	1 is portable, 1 is not.
WWA7j-1	Treatment Plant sludge production of wet sludge/biosolids	tonne/year		Okay	
WWA7j-2	Percentage of dry solids in wastewater sludge/biosolids	%	7.46%	Can a data value be populated based on an average of the values shown so 9.33%?	Are you able to answer this question? Data value added.
WWA7l	Treatment Plant backup generators	Number	0	No portable generators? If you don't have a portable generator, what do you do if/when there is a power failure?	Wastewater Treatment Plants usually have space available in ponds for such eventualities, which provides time to hire a generator or move the one from Junction Rd Pump Station.
WWE4g	Wet weather overflow regulation approach	Selection	No regulatory approach	Are discharges not covered by regulation or operating without consent?	No
WWE6a	Trade waste bylaw	Yes/No	Yes	Okay	
WWE6b	Individual trade waste consents	Number	1	Okay	
WWE6c	Companies breaching trade waste consents	Number	1	Are there companies that don't have trade waste consents but should?	No
WWE6d	Non-compliance actions in response to trade waste breaches	Comment	1	No actions taken - is that correct?	M2858971 January 2021 letter to Allied Faxi regarding their TWA exceedances. The data value should be 1 then? Data value changed.

Code	Measure	Units	Data	Audit Comments	Audit Response
WWE6e	Dedicated trade waste officer(s) on staff	FTE	0	Who/how is trade waste managed?	We were sending lab results regularly to Allied Faxi - this hasn't happened since the new lab took over.
WWS4d	The authority's response to issues with its sewerage system	Number	0	If somebody makes a complaint about a previously reported complaint e.g. an overflow and they are not happy with say the clean-up, do you treat that as a new separate complaint or is it linked to the previous complaint?	If the SR has been closed before the customer calls back then it will be treated as a new SR. We also note that it is a call back about a previous complaint relating to the work we have done. Are you able to count the call backs then? Can count call backs if SR's closed previously.
WWF6	Debt funding: Wastewater	$	$2,811,245	Is the data value shown the total debt or change in debt? Just need the change in debt from last year to this year.	Change in debt only, but consider that some entries was not posted on submission date. This value would now have changed following postings done. (NB) Last year's data value changed.
WWF9	Routine Maintenance: Wastewater	$	$620,896	A huge increase from last year - any reason for that?	These values are Water values - not Wastewater - should be fixed. Also, Comparatives not updated. What is meant by comparatives? Comparatives refer to last year's data. Last year's and this year's data values changed.
WWF10	Reactive Maintenance: Wastewater	$	$652,470	Quite an increase from last year - any reason for that?	These values are Water values - not Wastewater - should be fixed. Also, Comparatives not updated. What is meant by comparatives? Comparatives refer to last year's data. Last year's and this year's data values changed.
WWF11	Management Costs: Wastewater	$	$899,209	Quite an increase from last year - any reason for that?	These values are Water values - not Wastewater - should be fixed. Also, Comparatives not updated. What is meant by comparatives? Comparatives refer to last year's data. Last year's and this year's data values changed.
WWF12	Councils Contract Management Costs: Wastewater	$	$0	Okay	
SWA1b	Length of stormwater mains renewed using internal CAPEX	km	0	How easy is it to differentiate between renewals and new construction - what is the process?	

Code	Measure	Units	Data	Audit Comments	Audit Response
SWA1c	Length of new stormwater mains constructed using internal CAPEX	km	0	Are vested assets excluded from consideration?	We can but It is not easy to differentiate between renewals and new construction in the Asset Management System (AssetFinda). Vested assets are excluded. How was the differentiation between renewals and new construction done then - was it a case of having to look at each pipe and decide? If so then it is fair to say the data confidence is highly reliable? Renewals are identified by the fact that old pipe is decommissioned which can be observed spatially.
SWE5	Energy consumption: Stormwater	GJ/year	0	Is the charging or reporting not separated out for the 2 pump stations?	One pump is manual operated an runs on a diesel fuelled pump. (Criterion Bridge) The other Pump station has not used any KW/h during the 2020-21 year. 0 data value added.
SWS1	Stormwater Charge	$	153.24	What are the units of the data value provided? Can this be translated into median or average charge per property?	New data added. The 7 Urban areas have a CV based charge which we have averaged for this data.
SWF6a	Routine maintenance: Stormwater	$	$91,874	A huge increase from last year - any reason for that?	Last year values ($72,061 was reposted [changed] as they were not all inclusive. (NB).
SWF6b	Reactive maintenance: Stormwater	$	$57,549	Quite an increase from last year - any reason for that?	Nothing significant. Increase spend spread over a number of catchments. Most significant Paeroa.
SWF7	Management Costs: Stormwater	$	$357,014	A reasonable increase from last year - any reason for that?	Last year values ($364,378) was reposted [changed] as they were not all inclusive. (NB).
SWF8	Council Contract Management Costs: Stormwater	$	$0	Okay	

Table 8 Kaipara District Council

Code	Measure	Units	Data	Audit Comments	Audit Response
CB10	Internal staff	FTE	8	Was there any difficulty counting/apportioning the number of staff who provide overhead functions but not	Staff numbers are based off current numbers. These roles are for full time members, no other people do waters more than 0.5 fte.

Code	Measure	Units	Data	Audit Comments	Audit Response
				in a fulltime capacity but greater than 50% of their time? Is there a better way of determining the number of FTE's?	Are there many staff spending less than 50% of their time supporting waters? Very few staff spending less than 50% of their time supporting waters. If their time was added up it might be 1 person at most.
CB14a-1	Staff training hours allocated	hours/year	40	Oaky	
CB14a-2	Staff training hours undertaken	hours/year	25	Okay	
CB14b	Staff training enrolments	Number	5	Okay	
CB15a-1	Staff with an engineering degree	Number	2	Okay	
CB15a-2	Staff with an science degree	Number	2	Okay	
CB15a-3	Staff with another applicable degree	Number	3	What are the other degrees?	Bachelor of Arts and Masters in Environmental Management.
CB16	Continuing professional development enrolments	Number	1	What type of CPD is being undertaken?	Most likely mentoring and members of professional organisations.
CB20	Internet of things	Yes/No	Yes	Okay	
WSB8	Average Daily Residential Water Consumption	L/person/ day	457.2521624	Is the calculated value about what you would expect? It is a reasonable increase from the previous value and also significantly higher than a number of other organisations.	Based off KDC water balance report, may include figures from Dargaville Pool and the dairy factory. Is it possible to exclude these figures from consideration? Not possible to exclude them.
WSA1b	Length of water mains renewed using internal CAPEX	km	0	How easy it is to differentiate between renewals and new construction - what is the process? Are vested asset excluded from consideration?	Vested assets are excluded from consideration. Renewals has a renewals program, new assets inputted vias asbuilts, and install date is listed as date of asset being placed into GIS system. So, the renewals length comes from the renewals program - is that correct? Do you also not change the install date for renewed mains? Length comes from the renewals program. Renewed pipes are also entered as new assets via asbuilts with new install dates. This may have caused a problem
WSA1c	Length of new water mains constructed using internal CAPEX	km	6		

Code	Measure	Units	Data	Audit Comments	Audit Response
					when querying AssetFinda but fortunately there are no renewals this year.
WSA4a	Water Treatment Plant Standby Generators	Number	0	Is it possible to provide a data value or it is '0'?	Answer is 0.
WSA5a	Water Pump Stations Standby Generators	Number	2	Are either of the standby generators portable? If so, where are they normally located?	No portable standby generators.
WSE1a	Estimated total network water loss	m3/year	375457	Could total volumes not also be drawn from the water balance report? Without this information average residential water consumption appears extremely high.	18830 for Apparent losses and 356627 for Real losses (CARL) Table 6.1 Water Balance Report. So, a data value of 375,457 can be entered? What would the data confidence be? Yes, add a data value of 375,457 and apply a data confidence of Reliable.
WSE1f	UARL (unavoidable annual real loss)	m3/year	85238	How were you able to determine a value in 2018/19? Do you not use the Water Loss Benchmark Spreadsheet?	85238 m3 all UARL added up from schemes times 365. So, a data value of 85238 can be added or 85238x365? What would the data confidence be? Data value should be 85238. Apply a data confidence of Reliable.
WSS10b	Resolution for urgent water supply fault call-outs	hrs	5.62	Converted time provided (5:37) to hours. Does this value seem reasonable?	Yes
WSS10d	Resolution for non-urgent water supply fault call-outs	hrs	2.73	Converted time provided (2:44) to hours. Does this value seem reasonable especially in relation to urgent callouts?	Yes
WSF6	Debt funding: Water Supply	$		Do you know if the council is carrying any debt for the water activity?	Yes but there is too much uncertainty in getting statistics.
WSF9a	Routine maintenance: Water Supply	$	$570,977	Okay	
WSF9b	Reactive maintenance: Water Supply	$	$765,040	Okay	
WSF10	Management Costs: Water Supply	$	$901,904	Okay	
WSF11	Council Contract Management Costs : Water Supply	$	$0	Is the data value just management costs i.e. it does not include costs for actual O&M?	Cost paid out to the contractor from council to manage, maintain and run the water supply system.

Code	Measure	Units	Data	Audit Comments	Audit Response
					This should be Council's own internal cost for managing the contractor e.g. if you have staff dedicated to managing the contactor then their salaries would be entered here. Is the $375,754 already included in WSF9a and 9b? These are management costs that the contractor charges KDC and relate to the maintenance work they do - KDC do not have any staff involved in managing the contractor but surprised there would be no cost. The costs are not already included in WSF9a and 9b but KDC was not happy to proportion them across the 2 measures. Have zero'd the data value as it is misleading when compared to other organisations but it does mean that overall, the costs will be understated.
WWB1b	Wastewater Service Coverage	%	42.45%	Okay	
WWA1b	Length of wastewater mains renewed using internal CAPEX	km	0	How easy it is to differentiate between renewals and new construction what is the process? Are vested assets excluded from consideration?	Vested assets are excluded from consideration. Renewals has a renewals program, new assets inputted vias asbuilts, and install date is listed as date of asset being placed into GIS system. So, the renewals length comes from the renewals program - is that correct? Do you also not change the install date for renewed mains? Length comes from the renewals program. Renewed pipes are also entered as new assets via asbuilts with new install dates. This may have caused a problem when querying AssetFinda but fortunately there are no renewals this year.
WWA1c	Length of new wastewater mains constructed using internal CAPEX	km	0.2		
WWA5a	Wastewater Pump Stations Standby Generators	Number	1	Is the 1 standby generator portable? If so, where is it normally located?	Portable and is kept between Dargaville and Mangawhai depending on need.
WWA7j-1	Treatment Plant sludge production of wet sludge/biosolids	tonne/year	520	Assuming there is sludge production, is the information unavailable?	10 tonne a week of sludge is removed from Mangawhai WWTP so 520 tonnes per year. Result is in the contractor monthly report. Other wastewater systems

Code	Measure	Units	Data	Audit Comments	Audit Response
WWA7j-2	Percentage of dry solids in wastewater sludge/biosolids	%			sludge is not removed annually, so other waste water systems are not available. So, can add a data value of 520 - is that correct? What would the data confidence be? Add data value of 520. Apply a data confidence of Uncertain.
WWA7l	Treatment Plant backup generators	Number	1	No generators at all? Enter '0' against each treatment plant.	Used for plants and pump stations, when power is down. Are the 2 generators portable? Can they also be used for pump stations in addition to the 1 portable generator mentioned above? There are 2 portable generators total that can be used for treatment plants or pump stations. Changed the data so that 1 is allocated to pump stations and 1 is allocated to treatment plants.
WWE4g	Wet weather overflow regulation approach	Selection	Treated as emergency discharge	Okay	
WWE6a	Trade waste bylaw	Yes/No	Yes	Okay	
WWE6b	Individual trade waste consents	Number	0	Do you have a trade waste database?	There are no tradewaste consents in Kaipara.
WWE6c	Companies breaching trade waste consents	Number	0	Do you have a trade waste database?	There are no tradewaste consents in Kaipara.
WWE6d	Non-compliance actions in response to trade waste breaches	Comment	0	No actions taken - is that correct?	There are no tradewaste consents in Kaipara.
WWE6e	Dedicated trade waste officer(s) on staff	FTE	0	Who/how is trade waste managed?	There are no tradewaste consents in Kaipara. So, there is no management of trade waste at all? No, but there are some trade waste agreements in place where companies can take their tradewaste to treatment plants.
WWS4d	The authority's response to issues with its sewerage system	Number	0	Okay	

Code	Measure	Units	Data	Audit Comments	Audit Response
WWF6	Debt funding: Wastewater	$		Do you know if the council is carrying any debt for the wastewater activity?	Yes there is debt but again this figure has too much uncertainty.
WWF9	Routine Maintenance: Wastewater	$	$528,612	Okay	
WWF10	Reactive Maintenance: Wastewater	$	$496,938	Okay	
WWF11	Management Costs: Wastewater	$	$1,529,757	Okay	
WWF12	Councils Contract Management Costs: Wastewater	$	$0	Is the data value just management costs i.e. it does not include costs for actual O&M?	Cost paid out to the contractor from council to manage, maintain and run the wastewater system. This should be Council's own internal cost for managing the contractor e.g. if you have staff dedicated to managing the contactor then their salaries would be entered here. Is the $234,631 already included in WWF9 and 10? These are management costs that the contractor charges KDC and relate to the maintenance work they do - KDC do not have any staff involved in managing the contractor but surprised there would be no cost. The costs are not already included in WWF9 and 10 but KDC was not happy to proportion them across the 2 measures. Have zero'd the data value as it is misleading when compared to other organisations but it does mean that overall, the costs will be understated.
SWA1b	Length of stormwater mains renewed using internal CAPEX	km	0	How easy it is to differentiate between renewals and new construction - what is the process? Are vested assets excluded?	Vested assets are excluded from consideration. Renewals has a renewals program, new assets inputted vias asbuilts, and install date is listed as date of asset being placed into GIS system. So, the renewals length comes from the renewals program - is that correct? Do you also not change the install date for renewed mains? Length comes from the renewals program. Renewed pipes are also entered as new assets via asbuilts with
SWA1c	Length of new stormwater mains constructed using internal CAPEX	km	1.2		

Code	Measure	Units	Data	Audit Comments	Audit Response
					new install dates. This may have caused a problem when querying AssetFinda but fortunately there are no renewals this year.
SWE5	Energy consumption: Stormwater	GJ/year	0	Okay	
SWS1	Stormwater Charge	$	192.32	Okay	
SWF6a	Routine maintenance: Stormwater	$	$51,479	Okay	
SWF6b	Reactive maintenance: Stormwater	$	$364,968	Okay	
SWF7	Management Costs: Stormwater	$	$419,157	Okay	
SWF8	Council Contract Management Costs: Stormwater	$	$0	Is the data value just management costs i.e. it does not include costs for actual O&M?	Cost paid out to the contractor from council to manage, maintain and run the stormwater system. This should be Council's own internal cost for managing the contractor e.g. if you have staff dedicated to managing the contactor then their salaries would be entered here. Is the $166,818 already included in SWF6a and 6b? These are management costs that the contractor charges KDC and relate to the maintenance work they do - KDC do not have any staff involved in managing the contractor but surprised there would be no cost. The costs are not already included in SWF6a and 6b but KDC was not happy to proportion them across the 2 measures. Have zero'd the data value as it is misleading when compared to other organisations but it does mean that overall, the costs will be understated.

Table 9 Waipa District Council

Code	Measure	Units	Data	Audit Comments	Audit Response
CB10	Internal staff	FTE	54.41	Was there any difficulty counting/apportioning the number of staff who provide overhead functions but not in a fulltime capacity but greater than 50% of their time? Is there a better way of determining the number of FTE's? Any reason for the increase from last year?	Water Services team restructure occurred during the financial year covered and introduced a number of additional roles, so this is the cause of the increase. Last year we had 28 direct staff, this year we have 37 direct staff. Was it difficult establishing the 1.41 Administrator as it seems quite a precise number? The 1.41 was from last year as the number of administerial staff and their roles has not changed.
CB14a-1	Staff training hours allocated	hours/year		Is there a training budget that could be turned into an hrs/staff number based on an average hourly rate?	Are you able to answer this question? Too difficult to get a number.
CB14a-2	Staff training hours undertaken	hours/year	748	Does this cover contracted and internal staff? Could these hours be normalised by the number of internal staff, or staff and contractors?	The data does not include contractors and consultants that are not on our headcount/payroll, we do not record or hold their information. The information is based on internal staff only. Could the 748 be divided by say the 37 direct staff which would give an average of approx. 20hrs/year? No, different groups of staff to different types and quantities of training so an average would be misleading.
CB14b	Staff training enrolments	Number	57	Does this cover contracted and internal staff?	As per above answer.
CB15a-1	Staff with an engineering degree	Number		Okay	
CB15a-2	Staff with an science degree	Number		Okay	
CB15a-3	Staff with another applicable degree	Number		Okay	
CB16	Continuing professional development enrolments	Number	5	Does this cover contracted and internal staff? What type of CPD is being undertaken?	Looking at the study request forms which have been through the approval process, the type of CPD being undertaken is: NZC in Wastewater Treatment L4 & L5, NZ Diploma in Civil Engineering, Certificate in drinking water treatment and NZ Diploma in drinking water treatment L5.

Code	Measure	Units	Data	Audit Comments	Audit Response
CB20	Internet of things	Yes/No	No	Is there any confusion about IoT versus SCADA?	Yes, maybe some further clarification needed for this one. If interested, have a look at https://www.3agsystems.com/blog/iot-vs-scada.
WSB8	Average Daily Residential Water Consumption	L/person/ day	179.50	Okay	
WSA1b	Length of water mains renewed using internal CAPEX	km	4.9633	How easy it is to differentiate between renewals and new construction - what is the process? A reasonable increase in newly constructed water mains this year - was there a new development? Are vested asset excluded from consideration?	The process to find the Capex renewal vs constructed is as follows: 1. Download all assets from required class added in the timeframe. 2. Remove the ones which were added via maintenance or vested (these are not counted). 3. Based on what's left, there is a list of project numbers. 3. The project would tell what type it is. 4. The original "asset recognition form" would give the meterage in each project. Yes we did have an increase of water main construction this year (such as the C2/C3, Taylor Hill to Parallel etc) Very clear process explanation - thank you.
WSA1c	Length of new water mains constructed using internal CAPEX	km	6.8118		
WSA4a	Water Treatment Plant Standby Generators	Number	5	1 treatment plant does not have a standby generator - is that correct? If portable generators are included in the data value, where are they normally located?	Generators are located at Karapiro (fixed), Te Tahi, Kihikihi, Hicks Road and Alpha Street (trailer mounted) WTPs There are 4 trailer mounted generators is that correct? Where would they potentially be moved to since it seems there is only 1 WTP without a generator? There are 3 fixed generators in use, there is 1 fixed generator that is likely to be surplus and there is 1 portable generator which is hard-wired in so is not easily moved.
WSA5a	Water Pump Stations Standby Generators	Number	1	Is the 1 standby generator portable? If so, where is it normally located?	Will be kept at a WTP but could move locations between plants Is this generator 1 of the 5 above or is the overall total 6? No, so there is a total of 6.

Code	Measure	Units	Data	Audit Comments	Audit Response
WSE1a	Estimated total network water loss	m^3/year	715200	A bit of an increase on last year. Was that expected?	This value has been checked. WDC completes a water balance annually. At this point in time anything that cannot be accounted for is considered loss.
WSE1f	UARL (unavoidable annual real loss)	m^3/year	409862	Okay	
WSS10b	Resolution for urgent water supply fault call-outs	hrs	1.82	Okay	
WSS10d	Resolution for non-urgent water supply fault call-outs	hrs	1.03	Okay	
WSF6	Debt funding: Water Supply	$	$12,820,656	Is the data value shown the total debt or change in debt? Just need the change in debt from last year to this year.	This is just the difference So an increase in debt of $12,820,656? Yes
WSF9a	Routine maintenance: Water Supply	$	$581,522	Okay	
WSF9b	Reactive maintenance: Water Supply	$	$800,306	Okay	
WSF10	Management Costs: Water Supply	$	$2,485,694	Okay	
WSF11	Council Contract Management Costs : Water Supply	$	0	Does WDC have its own inhouse workforce i.e. nothing is outsourced? If so, then the data value can be $0.	Yes, internal workforce.
WWB1b	Wastewater Service Coverage	%	69.01%	Okay	
WWA1b	Length of wastewater mains renewed using internal CAPEX	km	0	How easy it is to differentiate between renewals and new construction - what is the process? A reasonable increase in newly constructed wastewater mains this year - was there a new development? Are vested assets excluded?	The process to find the Capex renewal vs constructed is as follows: 1. Download all assets from required class added in the timeframe. 2. Remove the ones which were added via maintenance or vested (these are not counted). 3. Based on what's left, there is a list of project numbers. 3. The project would tell what type it is. 4. The original "asset recognition form" would give the meterage in each project.
WWA1c	Length of new wastewater mains constructed using internal CAPEX	km	15.128		
WWA5a	Wastewater Pump Stations Standby Generators	Number	4	If portable generators are included in the data value, where are they normally located?	Albert St – 1 fixed generator, Christie Ave & Albert Park – 1 mobile generator, Te Awamutu & Kihikihi – 1

Code	Measure	Units	Data	Audit Comments	Audit Response
					mobile generator kept at TAWWTP, Cambridge – 1 mobile generator kept at CBWWTP. The rest of the backup generators have been taken out due to upgrades and will be taken back to pumpstations once ready. Data value changed.
WWA7j-1	Treatment Plant sludge production of wet sludge/biosolids	tonne/year	1642	Looking at the comments, how was the data value of 1642 derived? Is there a factor applied to the DS value of 730? Was last year's value correct?	The figure was taken from a recent report that was done for Waipa District Council called the "Waipa District Wide Wastewater Treatment Plant Sludge Management Plan GHD September 2021" - last year's figure could be wrong, the person who estimated this has since left.
WWA7j-2	Percentage of dry solids in wastewater sludge/biosolids	%	18%	Should the value be 0.18% or 18%?	I was given the number 18% - have updated it so it doesn't have the decimal point
WWA7l	Treatment Plant backup generators	Number	2	No portable generators?	TAWWTP has a fixed backup generator and CBWWTP has a mobile one kept on site.
WWE4g	Wet weather overflow regulation approach	Selection	Treated as emergency discharge	Is it possible to select a data value?	Emergency discharge, no Resource Consent Data value changed.
WWE6a	Trade waste bylaw	Yes/No	Yes	Okay	
WWE6b	Individual trade waste consents	Number	380.00	Do you have a trade waste database?	Yes a database is available.
WWE6c	Companies breaching trade waste consents	Number	51.00	Do you have a trade waste database?	As above.
WWE6d	Non-compliance actions in response to trade waste breaches	Comment	Performance management measures	Okay	
WWE6e	Dedicated trade waste officer(s) on staff	FTE	2	Okay	
WWS4d	The authority's response to issues with its sewerage system	Number	0	If somebody makes a complaint about a previously reported complaint e.g. an overflow and they are not happy with say the clean-up, do you treat that as a new	Separate as two different 'issues' as a result of one event.

Code	Measure	Units	Data	Audit Comments	Audit Response
				separate complaint or is it linked to the previous complaint?	What if someone complains that no one has turned up to do a repair - is that considered a different issue? Would start a new service request and link it to the previous one. Checked all service requests and there were none that fit this situation.
WWF6	Debt funding: Wastewater	$	$5,423,564	Is the data value shown the total debt or change in debt? Just need the change in debt from last year to this year.	This is just the difference So an increase in debt of $5,423,564? Yes
WWF9	Routine Maintenance: Wastewater	$	$37,364	Quite a drop from last year - any reason for that?	Are reliant on coding used by the business, looks like the type of expenditure previously coded to routine, is now coded to reactive.
WWF10	Reactive Maintenance: Wastewater	$	$614,409	Quite an increase from last year - any reason for that?	There is an $88k repair (in 20/21), other all expenditure in 20/21 looks appropriate. Difference in coding used between the two years.
WWF11	Management Costs: Wastewater	$	$1,122,811	Okay	
WWF12	Councils Contract Management Costs: Wastewater	$	$0	Does WDC have its own inhouse workforce i.e. nothing is outsourced?	We don't have a contract but we do get a company to do call outs for Wastewater issues that we have on the network such as clearing blockages etc. I have updated the number to reflect this. Is the number for the physical works that have been done? The number that is supposed to go here is $'s WDC spend on managing/supervising the contractor/s. This seems like a cost that should be added to the reactive maintenance cost. Will discuss in meeting. Yes, cost is for physical works. Need to check if it is include in routine or reactive maintenance costs. "Call out" cost of $362,622 already included in WWF10 so data value changed to $0. There is no management of this call out work.
SWA1b	Length of stormwater mains renewed using internal CAPEX	km	0.266	How easy it is to differentiate between renewals and new construction - what is the process?	The process to find the Capex renewal vs constructed is as follows: 1. Download all assets from required

Code	Measure	Units	Data	Audit Comments	Audit Response
SWA1c	Length of new stormwater mains constructed using internal CAPEX	km	2.09038	Are vested assets excluded from consideration?	class added in the timeframe. 2. Remove the ones which were added via maintenance or vested (these are not counted). 3. Based on what's left, there is a list of project numbers. 3. The project would tell what type it is. 4. The original "asset recognition form" would give the meterage in each project.
SWE5	Energy consumption: Stormwater	GJ/year	N/A	Okay	
SWS1	Stormwater Charge	$	$304.76	Are you able to provide a median or average value that property owners pay? The average house price in Waipa District as at Jul 21 was $848,927 - it would be acceptable to calculate an average charge using this price.	$848927 the amount would be $304.76 this is based on a rate per $ of 0.000359 Does the $304.76 feel about right? Yes, feels right.
SWF6a	Routine maintenance: Stormwater	$	$493,726	Quite an increase from last year - any reason for that?	Are reliant on coding used by the business, all expenditure in 20/21 looks appropriate. Have added $472,517.80 - see SWF8 comments.
SWF6b	Reactive maintenance: Stormwater	$	$5,165	Okay	
SWF7	Management Costs: Stormwater	$	$389,746	Okay	
SWF8	Council Contract Management Costs: Stormwater	$		Does WDC have its own inhouse workforce i.e. nothing is outsourced?	Camex are running the maintenance contract. Contracted Services = $472,517.80 & internal costs and supervision = $96,465. The number that is supposed to go here is $'s WDC spent on managing/supervising the contractor/s. So just the $96,465 should go against this measure and the $472,517.80 should go to SWF6a and 6b in addition to the costs that are already there. If the $'s cannot be split then it should all go to SWF6a. Will discuss in meeting. The $472,517.80 is for physical works so need to check if it is already included in the routine or reactive maintenance costs. Similarly need to check if the $96,465 is already included in the management costs.

Code	Measure	Units	Data	Audit Comments	Audit Response
					Changed cost to $96,465 which is internal costs and supervision for managing the contract.

Table 10 Wellington Water

Code	Measure	Units	Data	Audit Comments	Audit Response
CB10	Internal staff	FTE	234	This question may not be relevant since Wellington Water's sole focus is 3 waters - was there any difficulty counting/apportioning the number of staff who provide overhead functions but not in a fulltime capacity but greater than 50% of their time? Is there a better way of determining the number of FTE's?	Unable to answer.
CB14a-1	Staff training hours allocated	hours/year		Is there a training budget that could be turned into an hrs/yr/staff number based on an average hourly rate? Were contractors considered?	Unable to answer.
CB14a-2	Staff training hours undertaken	hours/year		Are there training records for employees that would record this data? If people are members of organisations Like Engineering NZ, how do they track the CPD hours needed to maintain their membership? Were contractors considered?	Unable to answer.
CB14b	Staff training enrolments	Number		What about staff who have to do ongoing training to remain certified to be able to do their jobs? How is this tracked and recorded? Were contractors considered?	Unable to answer.
CB15a-1	Staff with an engineering degree	Number	62	Does the 62 include any contractors?	Unable to answer.
CB15a-2	Staff with an science degree	Number	6	Does the 6 include any contactors?	Unable to answer.
CB15a-3	Staff with another applicable degree	Number		Not recorded or zero other degrees? Were contractors considered?	Unable to answer.
CB16	Continuing professional development enrolments	Number		Membership of ENZ requires an annual commitment to CPD in order to maintain membership or certification. How are members achieving this?	Unable to answer.

Code	Measure	Units	Data	Audit Comments	Audit Response
				Were contractors considered?	
CB20	Internet of things	Yes/No	No	Is there any confusion about IoT versus SCADA or are the differences well understood?	Unable to answer.
WSB8	Average Daily Residential Water Consumption	L/person/ day	263.9230418	Is the calculated value about what you would expect given there is a slight increase from last year?	Unable to answer.
WSA1b	Length of water mains renewed using internal CAPEX	km	8.455	How easy it is to differentiate between renewals and new construction - what is the process? Are vested asset excluded from consideration?	Unable to answer.
WSA1c	Length of new water mains constructed using internal CAPEX	km	0		
WSA4a	Water Treatment Plant Standby Generators	Number	3	1 treatment plant does not have standby generator - is that correct? Are any of the 3 standby generators portable?	Unable to answer.
WSA5a	Water Pump Stations Standby Generators	Number	0	Are there any portable generators available if needed? If so, how many?	Unable to answer.
WSE1a	Estimated total network water loss	m^3/year	9,115,100	Is cell AA77 in the water loss spreadsheet? Any particular reason for the reduction from last year?	Unable to answer.
WSE1f	UARL (unavoidable annual real loss)	m^3/year	3,839,400	Is cell AD77 in the water loss spreadsheet?	Unable to answer.
WSS10b	Resolution for urgent water supply fault call-outs	hrs	8.28	Does the data value represent permanent return to service or does it include reinstatement as well?	Unable to answer.
WSS10d	Resolution for non-urgent water supply fault call-outs	hrs	160.2	Does the data value represent permanent return to service or does it include reinstatement as well?	Unable to answer.
WSF6	Debt funding: Water Supply	$	$22,738,000	Is the data value shown a change (Increase) in debt?	Unable to answer.
WSF9a	Routine maintenance: Water Supply	$	$8,300,277	Okay	
WSF9b	Reactive maintenance: Water Supply	$	$14,665,780	Okay	
WSF10	Management Costs: Water Supply	$	$9,928,353	Okay	

Code	Measure	Units	Data	Audit Comments	Audit Response
WSF11	Council Contract Management Costs : Water Supply	$	$28,084,455	Okay	
WWB1b	Wastewater Service Coverage	%	94.29%	Okay	
WWA1b	Length of wastewater mains renewed using internal CAPEX	km	6.475	How easy it is to differentiate between renewals and new construction - what is the process? Are vested asset excluded from consideration?	Unable to answer.
WWA1c	Length of new wastewater mains constructed using internal CAPEX	km	0		
WWA5a	Wastewater Pump Stations Standby Generators	Number	5	Are the 5 generators permanently installed or are some/all portable?	Unable to answer.
WWA7j-1	Treatment Plant sludge production of wet sludge/biosolids	tonne/year	27035	Should the data confidence be Less Reliable then if the Seaview value is dry?	Unable to answer.
WWA7j-2	Percentage of dry solids in wastewater sludge/biosolids	%	34.71%	Fixed the formula.	
WWA7l	Treatment Plant backup generators	Number	6	Are any of the backup generators portable?	Unable to answer.
WWE4g	Wet weather overflow regulation approach	Selection	Resource consent held for wet weather discharges	Okay	
WWE6a	Trade waste bylaw	Yes/No	Yes	Okay	
WWE6b	Individual trade waste consents	Number	$193.00	Okay	
WWE6c	Companies breaching trade waste consents	Number	$0.00	Is zero correct or has a data value not been sourced?	Unable to answer.
WWE6d	Non-compliance actions in response to trade waste breaches	Comment	$0.00	Is zero correct or has a data value not been sourced?	Unable to answer.

Code	Measure	Units	Data	Audit Comments	Audit Response
WWE6e	Dedicated trade waste officer(s) on staff	FTE	4	Okay	
WWS4d	The authority's response to issues with its sewerage system	Number	91	Has this measure been interpreted correctly? It is supposed to be the number of complaints about previously reported complaints e.g. if a sewer overflow is reported and then someone reports they are not happy with say the clean-up.	Unable to answer.
WWF6	Debt funding: Wastewater	$	$20,158,000	Is the data value shown a change (Increase) in debt?	Unable to answer.
WWF9	Routine Maintenance: Wastewater	$	$20,274,638	Okay	
WWF10	Reactive Maintenance: Wastewater	$	$6,010,582	Okay	
WWF11	Management Costs: Wastewater	$	$4,536,383	Okay	
WWF12	Councils Contract Management Costs: Wastewater	$	$19,267,842	Okay	
SWA1b	Length of stormwater mains renewed using internal CAPEX	km	0.156	How easy it is to differentiate between renewals and new construction - what is the process? Are vested asset excluded from consideration?	Unable to answer.
SWA1c	Length of new stormwater mains constructed using internal CAPEX	km	0.054		
SWE5	Energy consumption: Stormwater	GJ/year	301	Okay	
SWS1	Stormwater Charge	$		There is only one targeted rate in the Rating Information tab - is it not possible to get the other rates? Do you know how last year's data value was determined? Could that value be used this year with a Data Confidence of say Uncertain?	Unable to answer.

Code	Measure	Units	Data	Audit Comments	Audit Response
SWF6a	Routine maintenance: Stormwater	$	$3,893,629	Okay	
SWF6b	Reactive maintenance: Stormwater	$	$2,327,207	Okay	
SWF7	Management Costs: Stormwater	$	$2,484,019	Okay	
SWF8	Council Contract Management Costs: Stormwater	$	$10,300,146	Okay	

Table 11 Whangarei District Council

Code	Measure	Units	Data	Audit Comments	Audit Response
CB10	Internal staff	FTE	39	Was there any difficulty counting/apportioning the number of staff who provide overhead functions but not in a fulltime capacity but greater than 50% of their time? Is there a better way of determining the number of FTE's? Any notable reason for the increase in staff?	We did not include support staff. These numbers represent FTE in the 3 Waters. Increase in numbers due to vacant roles being filled. If support staff were counted, any idea how many FTE's they would equate to - approximately? Another 28 staff are involved in 3 waters on a part time basis. Not sure what this equates to in terms of FTE's. Reporting part time staff numbers separately from FTE's might be a sensible way to go.
CB14a-1	Staff training hours allocated	hours/year	3.57	Could the training budget be turned into an hrs/staff number based on an average hourly rate?	Budget divided by avg rate of $169/hr. 139 hrs/year seem very high - it will probably be higher than any other council involved in the NPR. Maybe set the data confidence at Very Uncertain. Further divided by the 39 FTE's. There was a moratorium on training due to Covid.
CB14a-2	Staff training hours undertaken	hours/year	1.60	Hours per staff member was intended for this field. Could these hours be normalised by the number of internal staff, or staff and contractors?	Budget divided by avg rate of $169/hr. By budget does this mean budget spent as opposed to budget allocated in the above measure? Further divided by the 39 FTE's. There was a moratorium on training due to Covid.
CB14b	Staff training enrolments	Number	67		

Code	Measure	Units	Data	Audit Comments	Audit Response
CB15a-1	Staff with an engineering degree	Number	7	Do the data values include both WDC staff and contractors? If contactors are not included, is it easy to get that data?	No contractors currently working in either Water, Wastewater or Stormwater and wearing WDC hat.
CB15a-2	Staff with an science degree	Number	4		
CB15a-3	Staff with another applicable degree	Number	1	Is the data value for a staff member or a contractor? If contactors were not considered, is it easy to get that data? What type of degree is it?	Staff member only. No contractors currently working in either Water, Wastewater or Stormwater and wearing WDC hat. Bachelor of Applied Management (Project management).
CB16	Continuing professional development enrolments	Number	5	Do the data value include both WDC staff and contractors? If contactors are not included, is it easy to get that data?	Staff member only. No contractors currently working in either Water, Wastewater or Stormwater and wearing WDC hat.
CB20	Internet of things	Yes/No	No	Is there any confusion about IoT versus SCADA?	No. Only conventional SCADA in use, no IoT installations.
WSB8	Average Daily Residential Water Consumption	L/person/ day	188.214244	Okay	
WSA1b	Length of water mains renewed using internal CAPEX	km	0.76	How easy it is to differentiate between renewals and new construction - what is the process? No new water mains is unusual - is there a delay in processing information? Are vested assets excluded from consideration?	Yes, vested assets are excluded internal Capex wasn't used. According to our policy, new and renewed assets have to be vested within 3 months. New and renewed can by differentiated by the PJ Code which is based on the project setup. Is it possible/likely the wrong PJ code can get allocated? Is it definite that there were no new water mains installed? Only renewals are funded by CAPEX - new pipes are vested from developments. So unlikely the wrong PJ code gets allocated.
WSA1c	Length of new water mains constructed using internal CAPEX	km	0		
WSA4a	Water Treatment Plant Standby Generators	Number	5	2 treatment plants do not have standby generators - is that correct? If portable generators are included in the data value, where are they normally located?	Yes. Although the 40kVA generator located at Maungakaramea WTP is sized sufficiently for one other treatment plant (Mangapai) and all booster pump stations. Is the 40kVA generator permanently installed or can it easily be moved to the other sites?

Code	Measure	Units	Data	Audit Comments	Audit Response
					The generator is on a trailer and suitable for use with most booster pumps and the treatment plant.
WSA5a	Water Pump Stations Standby Generators	Number	1	Is the 1 standby generator portable? If so, where is it normally located?	See above, all pump stations with non-permanent generator connections are sized to fit the portable generator at Maungakaramea WTP. Shared asset, if multiple generators are required then the rest are hired. Okay, sounds like the 40kVA generator might be a pseudo portable generator. Yes
WSE1a	Estimated total network water loss	m^3/year	2185612	Okay	
WSE1f	UARL (unavoidable annual real loss)	m^3/year	692349	Okay	
WSS10b	Resolution for urgent water supply fault call-outs	hrs	1.67	Okay	
WSS10d	Resolution for non-urgent water supply fault call-outs	hrs	3.39	Okay	
WSF6	Debt funding: Water Supply	$	$0	Okay	
WSF9a	Routine maintenance: Water Supply	$	$3,642,612	See comment below.	Done
WSF9b	Reactive maintenance: Water Supply	$		Shift data value to routine maintenance as per definition guide instruction	Done
WSF10	Management Costs: Water Supply	$	$4,663,633	Okay	
WSF11	Council Contract Management Costs : Water Supply	$		Is operation and maintenance of the network all done inhouse? If contractors are used then any costs for managing and supervising those relationships should be entered against this measure.	The question relates specifically to Council Controlled Organisations. All maintenance undertake by Contractors. Management of contractors is not separately recorded. Are the costs for managing contractors included in any of the costs provided e.g. WSF10? What the NPR is try to do, is measure what the total cost of the water activity is.

Code	Measure	Units	Data	Audit Comments	Audit Response
					Being looked at - could be $100k but need to make sure costs are not included elsewhere. Zero removed.
WWB1b	Wastewater Service Coverage	%	59.95%	Okay	
WWA1b	Length of wastewater mains renewed using internal CAPEX	km	0.77	How easy it is to differentiate between renewals and new construction - what is the process? Are vested assets excluded from consideration?	Is the answer here the same as for water? Yes, same as for water.
WWA1c	Length of new wastewater mains constructed using internal CAPEX	km	0		
WWA5a	Wastewater Pump Stations Standby Generators	Number	4	Is the 1 standby generator portable? If so, where is it normally located?	Diesel generator not portable 4Tonnes located at Okara Pump Station. 4 Tonnes - is that the weight of the generator? Yes
WWA7j-1	Treatment Plant sludge production of wet sludge/biosolids	tonne/year	4759	Okay	
WWA7j-2	Percentage of dry solids in wastewater sludge/biosolids	%	20.50%	It looks like the decimal point in last year's value was in the wrong place - is that correct?	The percentage of dry solid has been consistent of 20.5% . Last year number was different due to formatting issue in excel.
WWA7l	Treatment Plant backup generators	Number	0	No generators at all including portable generators? If you don't have a portable generator, what do you do if/when there is a power failure?	We have portable generators but they are for pumpstation back up. We were looking to purchase a pre-owned unit at 720kVa but it would cost $120K + $20K for an automatic transfer switch. How many portable generators are there as the number should be included in WWA5a above? 3 portable generators.
WWE4g	Wet weather overflow regulation approach	Selection	Resource consent held for wet weather discharges	What does '0' mean? The data cell is supposed to provide a drop down selection. Should the selection be 'No regulatory approach' or maybe the same as last year?	It should be same as last year.

Code	Measure	Units	Data	Audit Comments	Audit Response
WWE6a	Trade waste bylaw	Yes/No	yes	Okay	
WWE6b	Individual trade waste consents	Number	455	Do you mean 455 individual consents? Do you have a trade waste database	Yes, we do have Tech 1 to manage all of the consents. So 455 individual consents - is that correct? Yes
WWE6c	Companies breaching trade waste consents	Number	0	Do you have a trade waste database? No breaches from 455 consents seems unusual.	Yes, Tech 1. Still surprised there a no breaches from that many consents. No breaches that are able to be proven - get reports of breaches but there is never any conclusive evidence.
WWE6d	Non-compliance actions in response to trade waste breaches	Comment	N/A	N/A as in no actions were taken?	No breaches of consent conditions hence no action required.
WWE6e	Dedicated trade waste officer(s) on staff	FTE	1	Does the 1 resource cope with the workload?	Yes so far so good.
WWS4d	The authority's response to issues with its sewerage system	Number		Is the data value '0' or is it not measured?	We did respond to deal with sewer issues. Complaints about complaints are not measured - is that correct? Yes, just open new requests.
WWF6	Debt funding: Wastewater	$	-$10,215,000	Okay	
WWF9	Routine Maintenance: Wastewater	$	$3,737,976.24	See comment below.	Done
WWF10	Reactive Maintenance: Wastewater	$		Shift data value to routine maintenance as per definition guide instruction.	Done
WWF11	Management Costs: Wastewater	$	$2,936,608	Okay	
WWF12	Councils Contract Management Costs: Wastewater	$		Is operation and maintenance of the network all done inhouse? If contractors are used then any costs for managing and supervising those relationships should be entered against this measure.	WASTEWATER TEAM TO RESPOND. Definition says 'council's contract management costs for management of the network'. Is there a response yet? Being looked at - could be $100k but need to make sure costs are not included elsewhere.

Code	Measure	Units	Data	Audit Comments	Audit Response
SWA1b	Length of stormwater mains renewed using internal CAPEX	km	0.82	How easy it is to differentiate between renewals and new construction - what is the process? Are vested assets excluded from consideration?	This is differentiated - there were no addition stormwater mains constructed by WDC only new vested assets. It does not include vested asset.
SWA1c	Length of new stormwater mains constructed using internal CAPEX	km	0		
SWE5	Energy consumption: Stormwater	GJ/year	N.A	Okay	
SWS1	Stormwater Charge	$		How is the stormwater activity funded - presumably through rates? If so, are you able to provide a median or average value that property owners pay?	Any answer to this? No, difficulty finding a number.
SWF6a	Routine maintenance: Stormwater	$	$704,550	See comment below.	Done
SWF6b	Reactive maintenance: Stormwater	$		Shift data value to routine maintenance as per definition guide instruction.	Done
SWF7	Management Costs: Stormwater	$	$969,104	Okay	
SWF8	Council Contract Management Costs: Stormwater	$		Is operation and maintenance of the network all done inhouse? If contractors are used then any costs for managing and supervising those relationships should be entered against this measure.	STORMWATER TEAM TO RESPOND. Definition says 'council's contract management costs for management of the network'. Is there a response yet? Being looked at - could be $100k but need to make sure costs are not included elsewhere. Zero removed.