

2023

8.3 2022-2023 GROUND AND SURFACE WATER TAKE COMPLIANCE MONITORING REPORT

Information Only - No Decision Required

Report To:	Environment and Regulatory Committee
Meeting Date:	3 August 2023
Report Author:	Neil Green, Compliance and Investigations Officer
Report Authorisers:	Adrian Humphries, Regulatory Services Manager
Report Number:	RRC23-08-3

1. Summary / Te Tuhinga Whakarāpotō

- 1.1 Tasman District Council monitors all water takes that are subject to water metering requirements. Monitoring involves conducting a site visit and/or desktop monitoring for the purpose of assessing compliance with Resource Consent Conditions, Resource Management (Measuring and Reporting of Water Takes) Regulations 2010 and permitted activity rules of the Tasman Resource Management Plan.
- 1.2 Consent holders, where fully compliant, are recorded as such. Where they do not meet their obligations, the Council employs a variety of approaches to achieve compliance. These may range from giving education and advice, issuing formal notices of direction, through to issuing infringement fines or considering prosecution where initial directions are not complied with.
- 1.3 The following are the key points from the monitoring during the 2022-2023 year:
 - 1.3.1 1188 resource consents were overseen in the district wide monitoring programme.
 - 1.3.2 921 resource consents were active water users in the 2022-2023 summer season.
 - 1.3.3 858 of the active resource consents are now using electronic means for data submission.
 - 1.3.4 116 consent holders using electronic reporting are doing so via telemetry.
 - 1.3.5 577 water takes were audited during the 2022-2023 summer season.
 - 1.3.6 117 permitted activity takes were monitored.
- 1.4 The following are the key points of the compliance behaviour of water users over the season.
 - 1.4.1 98% (900 out of 921 active resource consents) were rated fully compliant.
 - 1.4.2 1% (13 out of 921 active resource consents) were rated low risk non-compliant.
 - 1.4.3 1% (8 out of 921 active resource consents) were rated moderate risk non-compliant or significantly non-compliant.

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- 1.4.4 Two abatement notices were issued for further enforcement action.
- 1.4.5 No infringement notices were issued.
- 1.4.6 13 formal warnings were issued.
- 1.4.7 Six missing readings audit fees were issued for persistently missing readings.
- 1.5 The Waimea Community Dam is signalled to become operational at some point during this coming water season. The monitoring team is currently preparing for this next phase and is building or refining administrative and operational processes and procedures to enable a smooth and seamless transition.
- 1.6 One of the fundamental upgrades will be to the current database to allow seamless transfer of real time data. This will allow us to deliver even more timely and effective water resource management, including real time assessment of compliance with consent conditions.

2. Recommendation/s / Ngā Tūhunga**That the Environment and Regulatory Committee**

- 1. **receives the 2022-2023 Ground and Surface Water Take Compliance Monitoring Report .**

3. Purpose / Kaupapa

- 3.1 The purpose of this report is to present the results of the 2022/2023 compliance monitoring programme for ground and surface water takes in Tasman District.
- 3.2 The programme's principal purpose is to monitor individual consent holders' water use against consent restrictions. This report outlines that performance and compares it to previous seasons to allow changes or areas of concern to be identified.
- 3.3 The report also describes any enforcement response that may have been required where compliance was not being met.

4. Introduction / Whakataki

- 4.1 Tasman District Council runs a dedicated compliance monitoring programme designed to monitor ground and surface water resource use across the district's water management zones.
- 4.2 The six-month summer water season is defined as 1 November through to 31 May, although the monitoring programme itself is active throughout the year because of consented winter water use.
- 4.3 Resource consent conditions require users to provide year-round weekly water use information. The Council applies a pragmatic approach, and if users advise the Council they have ceased irrigation, weekly readings will not be required again until the start of the following season.

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- 4.4 The water use data provided is administered through a purpose-built system that allows the Council to meet several key objectives.
 - 4.4.1 Monitor consent holder compliance with their specified water volume restrictions imposed through their consents, including during periods of rationing.
 - 4.4.2 Support the Council in determining a response to poor compliance behaviour.
 - 4.4.3 Assist the Council in decision making around water resource management including during periods of dry weather.
 - 4.4.4 Assist the Council to meet regional and national reporting obligations on water resource use and user behaviour.
- 4.5 The structure and delivery of the compliance monitoring programme has been consistent for many years. However, three main factors influence the running of this programme:
 - 4.5.1 Level of sustained communication with resource consent holders.
 - 4.5.2 The seasons weather patterns and water users' response.
 - 4.5.3 Our ability to collect and process data in a timely manner.
- 4.6 The 2022-23 irrigation season was notable for its increased rainfall compared to recent seasons.

5. The 2022-2023 Compliance Monitoring Results / Hua

Consent Monitoring Numbers

- 5.1 The total number of resource consents within the Monitoring Programme has decreased over recent years as shown in the graph (blue line - figure 1) below. While consent numbers have declined in total, the overall trend has reduced in the past five years, and this is due to factors such as:
 - 5.1.1 Bona fide reviews in the Waimea and Tākaka Water Management Zones
 - 5.1.2 Consent holders surrendering unused consents.
 - 5.1.3 Amalgamation of resource consents to reduce consent holders annual running costs.
- 5.2 Figure 1 shows the relationship between resource consents deemed active (red line) and inactive (green line) over the five-year period. The weather pattern dictates the number of active water takes by need. The 2018/2019 year shows an increase in the active resource consents, compared with a significant decrease of in-active resource consents. This can be attributed to the severe drought that year and the increased need for water. The 2022/2023 year reflects the weather pattern with increased rainfall, showing a reduction in active water takes.

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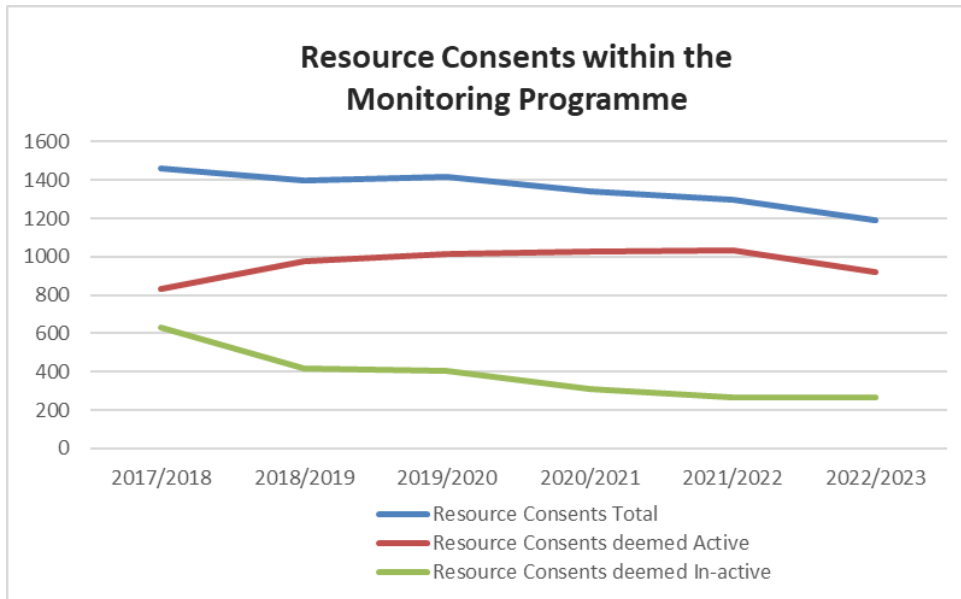


Figure 1: Trend in water take resource consent numbers, active and in-active users across last five years.

Weekly Readings Return Types

5.3 The Council provides consent holders with a range of options to submit weekly reading returns to meet their needs. The following graph (figure 2) shows that over the last five years of collected data, water user preference has not changed a great deal, with direct entry onto the Councils website being the most preferred option. Of the other preferred options, the mobile phone app (which links with the Councils direct web entry) has seen increased uptake of late. However, telemetry has remained somewhat static in recent years. The pre-paid card option has been slowly decreasing year on year but persists due to its preference with some users (despite the Councils efforts to move people away from this option).

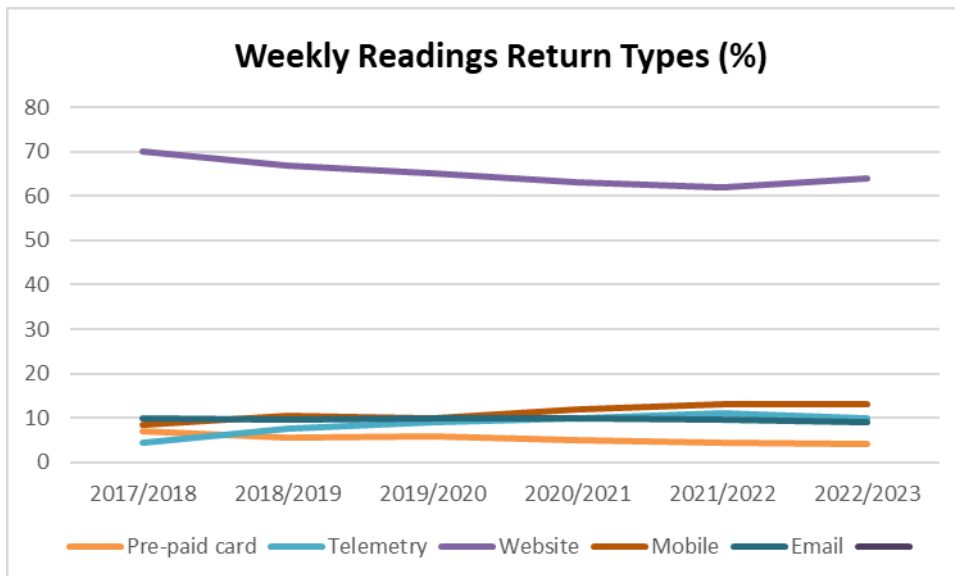


Figure 2: Trend in water users preferred method of submitting water use over last five years.

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Compliance Monitoring Results

- 5.3 Resource consents are graded one to four, according to the level of compliance with conditions of those consents. The overall compliance grade assigned for each Resource Consent is derived from the condition with the worst compliance grade.
- 5.4 The Council uses a compliance grading system that is described in the Ministry for the Environment’s “Best Practice Guidelines for Compliance, Monitoring and Enforcement under the Resource Management Act 1991”.

Table 1 below describes this grading system with explanation.

COMPLIANCE GRADE	
1	Full Compliance: All relevant consent conditions, plan rules, regulations, and national environmental standards are complied with.
2	Low Risk Non-Compliance: Compliance with most of the relevant consent conditions, plan rules, regulations, and national environmental standards. Non-compliance carries a low risk of adverse environmental effects or is technical in nature (e.g., failure to submit a report)
3	Moderate Non-Compliance: Non-compliance with some of the relevant consent conditions, plan rules, regulations, and national environmental standards, where there are some environmental consequences and/or there is a moderate risk of adverse environmental effects.
4	Significant Non-Compliance: Non-compliance with many of the relevant consent conditions, plan rules, regulations, and national environmental standards, where there are significant environmental consequences and/or there is a high risk of adverse environmental effects.

- 5.5 This year’s monitoring of water take consents revealed:
 - 5.5.1 98% (900 out of 921 active resource consents) were rated fully compliant.
 - 5.5.2 1% (13 out of 921 active resource consents) were rated low risk non-compliant.
 - 5.5.3 1% (8 out of 921 active resource consents) were rated moderate risk non-compliant or significantly non-compliant.
- 5.6 Figure 3 displays this year’s consent holder performance against the previous four seasons.

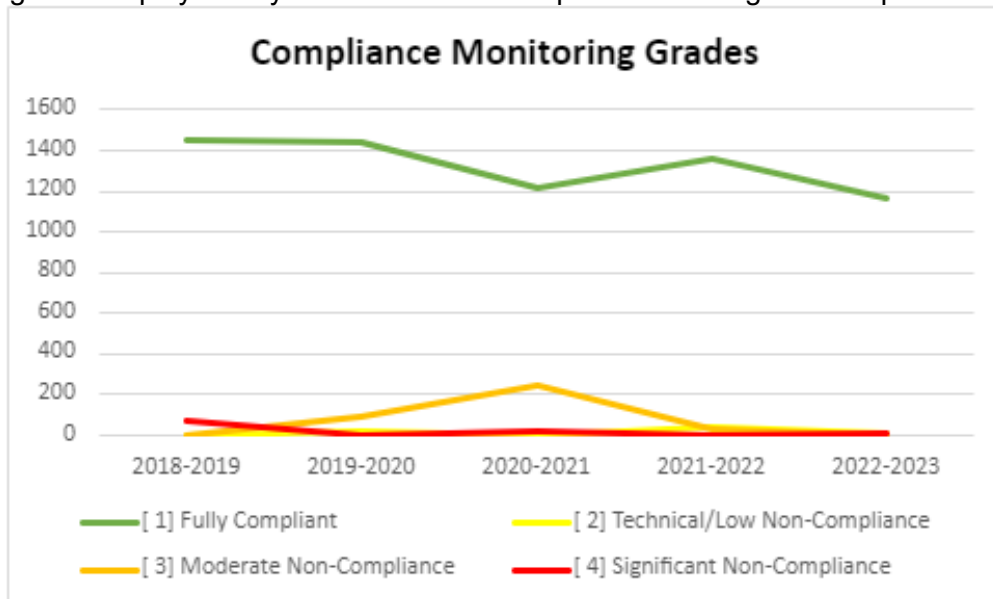


Figure 3: Compliance grading of active water consents as a total across five years.

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Water Meter Audits

- 5.7 The Council has operated a summer season water meter auditing programme for many years as part of its compliance monitoring strategy. This function is typically carried out by a student, employed by the Council between November and February of each summer season. The primary responsibility of this person is to conduct field-based auditing of water meters.
- 5.8 The following graph (figure 4) displays the trend in number of meters audited across the last five years. The data reflects a demand in audit effort in response to weather.

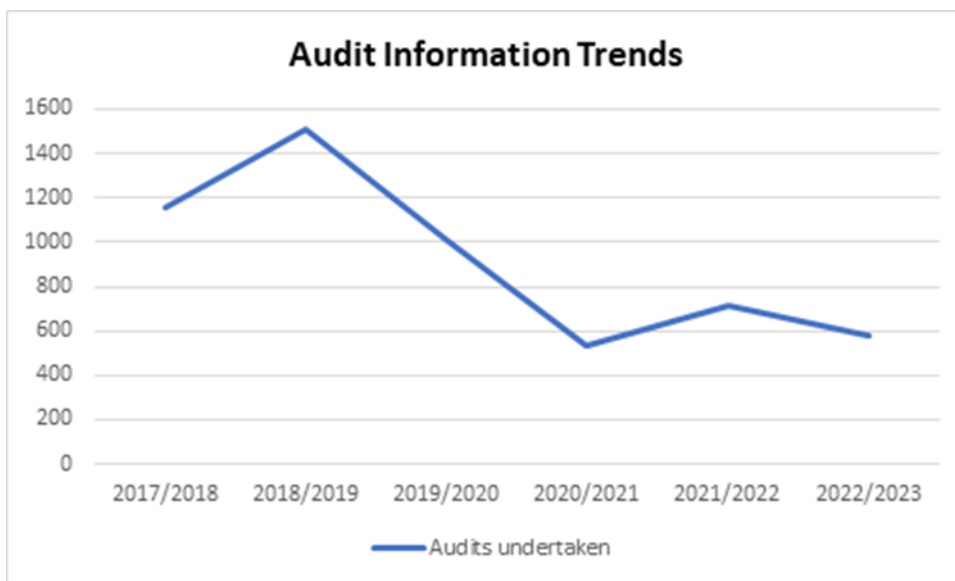


Figure 4: Number of physical audits undertaken over a season across time.

- 5.9 From the graph, the 2017/18 and more critically the 2018/19 audit activity reflects droughts and significant rationing. In the peak of the severe drought in 2018/19 six compliance staff were seconded to assist in auditing, as well as provide a visible presence around the district. These staff carried out multiple audits, often repeatedly, over the same water management zones where restrictions were highest. Increased resourcing and site visits are a typical response during drought where it is critical to have effective water management and ensure consent compliance when the water resource is under greatest pressure.

Over the last three years, water meter auditing has reverted to one summer student carrying out the function. As these have been wetter summer seasons, with reduced irrigation demand, audits have become more targeted toward dealing with missed readings. This is reflected in the lower number of overall audits carried out, but with more missed reading invoices being issued.

Missing Water Meter Readings

- 5.10 Providing water usage readings is a condition of consent. Over the years the Council has consistently communicated with water users regarding missed readings to improve this area of behaviour.

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- 5.11 In 2008, the Council included a specific fee for the purpose of recovering costs associated with auditing a water meter due to missed readings in its schedule of charges.
- 5.12 Where missed readings persisted, officers carried out audits. The cost of the audit was recovered from the consent holder where appropriate. This year six missed reading audit fees were issued.
- 5.13 Figure 5 demonstrates a reduction in the number of missed reading audit invoices issued in the past two seasons. This may be attributed to improved water user response as a result of applying the new fee.

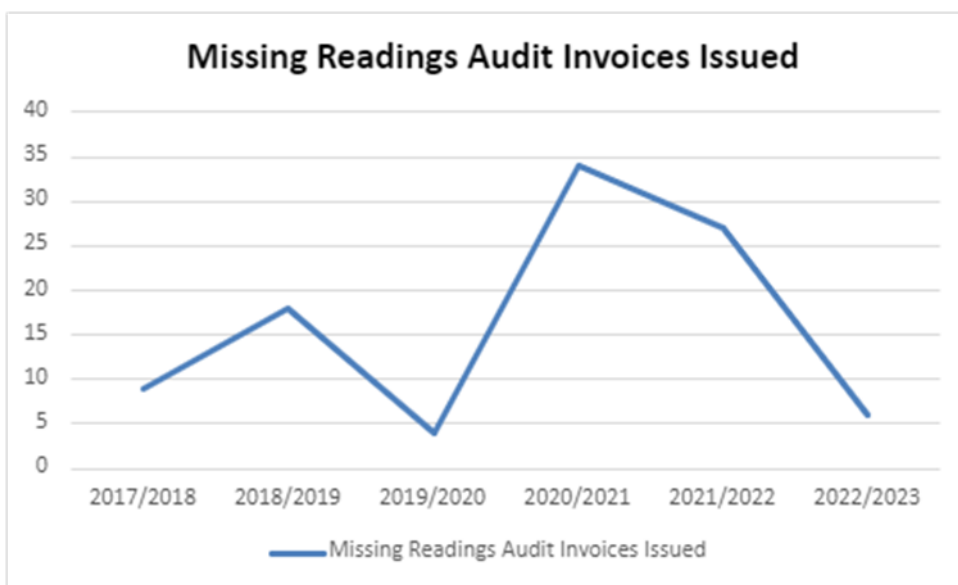


Figure 5: Audit invoices issued over last five years in response to missing readings.

- 5.14 The Council is currently looking at system upgrades that will allow for improved field data collection and management. This will allow for more auditing to be carried out in the time available and provide accurate data for Council records and any compliance action should it be required.

6. Enforcement / Whakakaha

The 2022/23 Summer irrigation season

- 6.1 While consistent messaging and compliance promotion is paramount in achieving positive compliance behaviour, some consent holders fail to achieve the necessary standard. In these cases, the Council utilises a range of regulatory tools to gain compliance (depending on the severity of the breach).
- 6.2 The following actions were taken by the Council in response to breaches:
 - 6.2.1 2 abatement notices were issued
 - 6.2.2 0 infringement notices were issued
 - 6.2.3 13 formal warnings were issued

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6.3 It is accepted that weather also plays a part in water user response. The 2018/2019 drought season saw a greater enforcement response to continued non-compliance. In the 2019/2020 season, which also had higher levels of rationing in some water management zones, we saw an improvement at the more serious end of offending, but an increase in the issue of formal warnings for various actions. These formal warnings are kept on record and may be drawn upon when considering any future enforcement action.

6.4 The level of non-compliance this season was low compared to previous years. The following graph (figure 6) compares this season’s enforcement activity against those of the previous four.

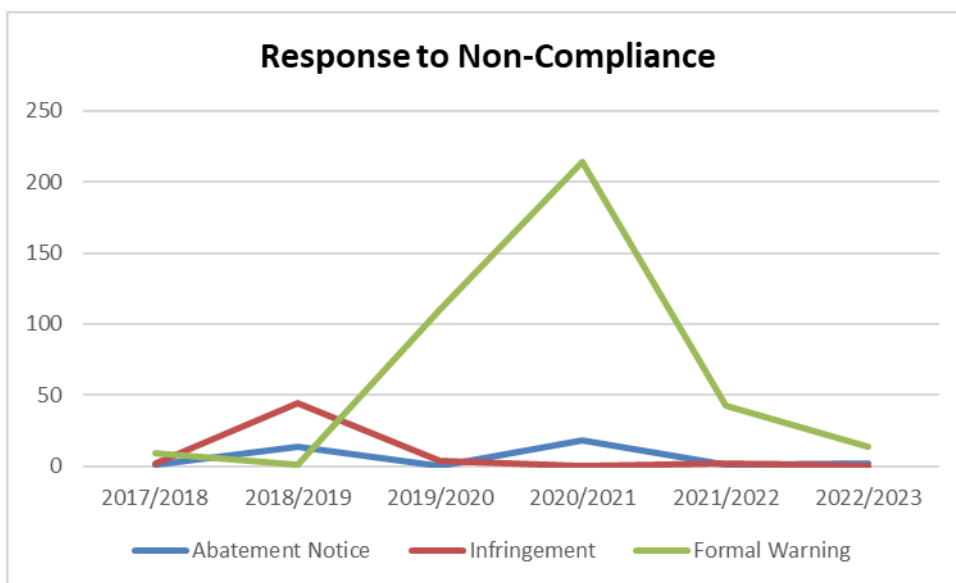


Figure 6: Specific enforcement actions for breaches as a total over last five years.

6.5 The graph clearly shows the higher level of formal warnings issued in the 2020/2021 season. These were primarily for missing readings. There was also a slight increase in the number of Abatement Notices issued for those who repeatedly failed to supply water meter readings. Correspondingly there were more missed reading audits carried out and invoices issued for that season. Engagement with consent holders at the time revealed that due to a wet season and limited rationing, reporting water readings became less of a priority. This trend persisted through to the end of the season where many water users failed to advise that they had finished irrigation, requiring significant follow up for missed readings. The need for infringement fines has been low since the summer drought of 2018/2019 where circumstances dictated a stronger response.

6.6 The Council actively corresponds throughout the year with water users with consistent messaging, especially around the requirement to report weekly water use regardless of weather patterns. The formal warnings have been a useful tool, and we have seen an improvement in water user response around reporting water use to date. Continued offending however will result in an elevated response until compliance is gained.

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- 7.1 With the recent lowering of the second stop log (physical barrier to stop flows through the second of the two large box culverts) the reservoir has started to fill.
- 7.2 This signals the start of the commissioning phase which once concluded will lead to the dam being determined “fully” operational”.
- 7.3 At this point, the transitional stage comes to an end and post dam resource consent conditions will come into effect. They set out water extraction volume limits, and volume limits for when rationing steps are applied.
- 7.4 The water monitoring team is currently preparing for this next phase and is building or refining administrative and operational processes and procedures to enable a smooth and seamless as possible transition.
- 7.5 Until that operational status is achieved the current rule regime as described in Resource Consents for both affiliated and unaffiliated will remain in place.

8. Real Time Data for Effective Water Management / Raraunga

- 8.1 In order to deliver even more efficient and effective water resource management, including consent compliance, the Council is undertaking capability upgrades to our current systems to allow seamless transfer of real time data.
- 8.2 This enhancement is particularly important for when the Waimea Community Dam becomes operational. The ability to receive and assess real time water abstraction data at any point in time will allow more dynamic and responsive consent condition monitoring. More importantly it will assist council in times of water restriction administering complex staged rationing, particularly in the Waimea plains.
- 8.3 The compliance team overseeing the water programme are currently assisting in the delivery of this programme of work.

9. Conclusions / Whakamutunga

- 9.1 The 2022/2023 season saw an improvement in compliance levels. The non-compliance that was detected was at the lower end of offending.
- 9.2 Work is continuing at pace to prepare the water monitoring programme for an operational Waimea Community Dam. This work is focused mostly on communication strategies, database changes and field monitoring work.
- 9.3 Gathering specifications and implementing a real time capable system is a critical next stage for effective monitoring of consent holders subject to an operational Waimea Community Dam.

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10. Attachments / Tuhinga tāpiri

Nil