

Site Compliance Report

Site No: REG602144
Site Owner: Waikato District Council
Site Name: Port Waikato Water Supply: Port Waikato-Waikaretu Rd, Port Waikato
Date: 16 August 2021

1 INTRODUCTION

The following resource consents are held for the site:

Resource Consent	Status	Description	Commenced	Expiry
AUTH136297.01.01	Current	To take water from the Maraetai Stream	4/05/2016	30/04/2051
AUTH136297.02.01	Current	Dam the Maraetai Stream for the purposes of public water supply and the associated diversion of water	4/05/2016	30/04/2051
AUTH136297.03.01	Current	To discharge backwash water from the water treatment plant to the Maraetai Stream	4/05/2016	30/04/2051

This report examines the level of compliance of Waikato District Council with the selected conditions of the resource consents.

2 BACKGROUND

The Port Waikato water supply system draws water from the Maraetai Stream for use in the adjacent School Camp, the Port Waikato Fire Station, public toilets and a small number of houses.



Figure 1. Water treatment plant location

Date Period	Site Compliance
1 July 2019 to 30 June 2020	High level of compliance
1 July 2018 to 30 June 2019	Partial compliance
1 July 2018 to 30 June 2019	Not assessed
1 July 2017 to 30 June 2018	Not assessed
1 July 2016 to 30 June 2017	Not assessed

With respect to exceedance(s) of condition 5 AUTH136297.01.01, thank you for submitting the outstanding Event Investigation Report (EIR), dated 1 November 2020, for the 2019/2020 period. Additionally, thank you for the EIR for the single exceedance recorded on 4 April 2021 and the explanation of the underlying cause of this event.

3 COMPLIANCE ASSESSMENT

Unless otherwise specified in this document this assessment covers the period from 1 July 2020 to 30 June 2021.

This compliance assessment has been undertaken based on the submitted annual report by the consent holder, monitoring data supplied throughout the compliance period and submitted EIR. Some administration, duplicate or irrelevant conditions have been omitted for brevity.

Please note that a description of the classification system used to describe compliance status is given in Appendix 1 of this report.

AUTH136297.01.01 - Surface water take

Activity Authorised: To take water from the Maraetai Stream	
Condition No.	Description
4	The maximum instantaneous net take rate shall not exceed 2.6 litres per second.
Evidence	Port Waikato Water Supply Operation Annual Report 2020-2021 (Doc # 21554290). Appendix A Collected Raw Data 2020 - 2021 (Doc # 21552718).
Status Reasoning	The annual report states: <i>The maximum instantaneous net take rate is compliant, with the maximum net take rate recorded at 2.0 L/s during 2020-21 period.</i>
Action Required	Full Compliance
5	The maximum net take volume in any 24 hour period shall not exceed 80 cubic metres.
Evidence	Port Waikato Water Supply Operation Annual Report 2020-2021 (Doc # 21554290). Appendix A Collected Raw Data 2020 - 2021 (Doc # 21552718). Event Investigation Report dated 11/8/2021 (Doc # 2158116).

Status Reasoning	<p>The annual report states:</p> <p><i>The maximum net take volume in any 24-hour period is non-compliant with 1 exceedance recorded on 04 April 2021, investigation report to follow; see Appendix A.</i></p> <p>A peak daily usage of 92m³ occurred on 4/4/21.</p> <p>Exceedance due to high water consumption on the network because of a tap in a public toilet block running continuously at full capacity.</p>	
Action Required	Implement further actions identified in EIR; warning alarm to be generated when abstraction total is nearing consented volume.	Low Risk Non-Compliance
6	<p>A water measuring system shall quantify water taken from the take location on a cumulative basis. The system shall have a reliable calibration to water flow and shall be maintained to an accuracy of +/- 5%.</p>	
Evidence	<p>Port Waikato Water Supply Operation Annual Report 2020-2021 (Doc # 21554290).</p> <p>Appendix C Port Waikato WTP inflow Calibration Certificate, dated 17 June 2020 (Doc # 16978234).</p>	
Status Reasoning	<p>The next flowmeter verifications for the inlets and outlets of WDC WTPs are scheduled for September 2021.</p>	
Action Required	Please forward a copy of the 2021 Port Waikato inflow meter Calibration Certificate to WRC once available.	Full Compliance
7	<p>The consent holder shall record water usage:</p> <ol style="list-style-type: none"> 1. On an at least weekly (seven day) basis (or at an increased frequency, if requested in writing by the Waikato Regional Council), or 2. On a daily basis, where condition 10 is effective. 	
Evidence	<p>Port Waikato Water Supply Operation Annual Report 2020-2021 (Doc # 21554290).</p> <p>Appendix A Collected Raw Data 2020 - 2021 (Doc # 21552718).</p>	
Status Reasoning	<p>Water usage daily readings have been submitted, as required by condition 7.</p>	
Action Required		Full Compliance
8	<p>The consent holder must develop and implement a system for continuously monitoring Maraetai Stream 7-day rolling average flow at or about NZTM 1753300 E 5859700 N ("Maraetai flow site").</p> <p>This system must:</p> <ol style="list-style-type: none"> 1. measure or model stream flow reliably; and 2. maintain a reliable stream flow calibration via spot flow gauging, regular weed removal and regular instrument calibration; and 3. have an emphasis on that part of the stream flow regime that is equal to or less than 9 litres per second; and 4. operate over the duration that this water take is authorised. 	
Evidence	<p>Port Waikato Water Supply Operation Annual Report 2020-2021 (Doc # 21554290).</p> <p>Appendix A Collected Raw Data 2020 - 2021 (Doc # 21552718).</p>	

	Email dated 11/1/2021 (Doc # 17905768).
Status Reasoning	Stream flow daily monitoring results in L/s have been submitted in Appendix A, as required by condition 7. Reported values are the 7-day rolling average (refer Email dated 11/1/2021).
Action Required	Full Compliance
9	The consent holder must continuously monitor and maintain records of the Maraetai Stream 7-day rolling average flow at Maraetai flow site.
Evidence	Port Waikato Water Supply Operation Annual Report 2020-2021 (Doc # 21554290). Appendix A Collected Raw Data 2020 - 2021 (Doc # 21552718). Email dated 11/1/2021 (Doc # 17905768).
Status Reasoning	Stream flow daily monitoring results in L/s have been submitted in Appendix A. Reported values are the 7-day rolling average (refer Email dated 11/1/2021).
Action Required	Full Compliance
10	When the 7-day rolling average flow at the Maraetai flow site, for 240 or more consecutive hours, is less than 8.55 litres per second, the take volume in any 48 hour period must not exceed 136 cubic metres.
Evidence	Port Waikato Water Supply Operation Annual Report 2020-2021 (Doc # 21554290). Appendix A Collected Raw Data 2020 - 2021 (Doc # 21552718).
Status Reasoning	The stream flow dropped below 8.55 litres per second on 23 occasions in the monitoring period. However, the longest duration was 144 hours. This occurred twice in the monitoring period from the 4/2/2021 to 9/2/2021, and from the 23/2/2021 to 28/2/2021.
Action Required	Full Compliance
11	Records collected under conditions 7 and 9 shall be supplied by the 31st July and 31st January each year, for the preceding six month (January to June and July to December) periods.
Evidence	Port Waikato Water Supply Operation Annual Report 2020-2021 (Doc # 21554290). Appendix A Collected Raw Data 2020 - 2021 (Doc # 21552718). Collected Raw Water Data 1/7/2021 - 31/12/2021 (Doc # 17903428) supplied in email dated 11/1/2021.
Status Reasoning	Six monthly records have been submitted as required by condition 11.
Action Required	Full Compliance
12	The consent holder shall supply an updated Water Management Plan to the Waikato Regional Council for approval (in a certifying capacity), within 12 months of consent commencement. Approval by the Waikato Regional Council of any updated Water Management Plan shall be

	<p>limited to an assessment of whether:</p> <ol style="list-style-type: none"> 1. The plan complies with the information requirements of Part 8.1.2.2 (Water Management Plans) of the Waikato Regional Plan; and 2. The plan is consistent with the conditions of this consent.
Evidence	Waikato District Council WDMP dated May 2021 Revision 4 (Doc # 20409280).
Status Reasoning	WDMP received by WRC 21/5/2021.
Action Required	Full Compliance
13	<p>The Water Management Plan shall be reviewed and updated at least every 5 years and submitted to the Waikato Regional Council for approval (in a certifying capacity). The consent holder may update the Water Management Plan at any time and submit it to the Waikato Regional Council for approval (in a certifying capacity).</p> <p>Approval by the Waikato Regional Council of any updated Water Management Plan shall be limited to the matters detailed in condition 12.</p>
Evidence	Waikato District Council WDMP dated May 2021 Revision 4 (Doc # 20409280).
Status Reasoning	
Action Required	Full Compliance
14	<p>The Waikato Regional Council may during 2021, 2026, 2031, 2036, 2041 and 2046 serve notice on the consent holder under section 128(1) of the Resource Management Act 1991, of its intention to review the conditions of this resource consent for the following purposes:</p> <ul style="list-style-type: none"> • to review the effectiveness of the conditions of this resource consent in avoiding or mitigating any adverse effects on the environment and if necessary to avoid, remedy or mitigate such effects by way of further or amended conditions; or • to review the adequacy of and the necessity for monitoring undertaken by the consent holder. <p>Advice Note: Costs associated with any review of the conditions of this resource consent will be recovered from the consent holder in accordance with the provisions of section 36 of the Resource Management Act 1991.</p>
Evidence	Not Applicable.
Status Reasoning	It is recommended that no review of the conditions of this resource consent occur in 2021. WRC considers that the existing conditions of consent are effective in avoiding or mitigating any potential adverse effects of the surface water take.
Action Required	Not assessed
	Low Risk Non-Compliance
	Authorisation Compliance:

AUTH136297.02.01 - Dam

Activity Authorised: Dam the Maraetai Stream for the purposes of public water supply and the associated diversion of water

Condition No.	Description
1	<p>The activity authorised by this resource consent shall be undertaken in general accordance with the following application documentation:</p> <ul style="list-style-type: none"> “Resource Consent Applications and Assessment of Environmental Effects” (Recorded as document number 3641372 on the Waikato Regional Councils document recording system); <p>and as identified in the resource consent conditions below which shall prevail in the event of any inconsistency between the aforementioned documentation and the conditions.</p>
Evidence	
Status Reasoning	
Action Required	Not assessed
	Not assessed
	Authorisation Compliance:

AUTH136297.03.01 - Water - other

Activity Authorised: To discharge backwash water from the water treatment plant to the Maraetai Stream

Condition No.	Description
6	The total aluminium concentration of the discharge shall not exceed 0.75 grams per cubic metre.
Evidence	<p>Port Waikato Water Supply Operation Annual Report 2020 - 2021 (Doc # 21554290).</p> <p>Appendix A Six Monthly Backwash Monitoring Data (Doc # 21551826).</p>
Status Reasoning	<p>Actual values of total aluminium from six monthly sampling are well within consent limits.</p> <ul style="list-style-type: none"> 24/11/2020 0.12g 23/02/2021 0.18g 31/05/2021 0.039g.
Action Required	Full Compliance
7	<p>The discharge shall not, after reasonable mixing in the Maraetai Stream, cause a conspicuous change in visual colour or clarity or any significant adverse effects on aquatic life.</p> <p><i>Advice Note: It is anticipated by the Waikato Regional Council that, to ensure compliance with condition 7, any 'non-routine' backwash water will need to be treated off site by the consent holder, and discharged in an alternative lawful manner.</i></p>
Evidence	
Status Reasoning	
Action Required	Not assessed
8	The consent holder shall sample the backwash water, at the point of discharge from the treatment plant, at least once every six months and shall analyse for concentrations of:

	<ol style="list-style-type: none"> 1. total and dissolved aluminium 2. total suspended solids 3. pH <p>Results shall be forwarded to the Waikato Regional Council within one calendar month of sampling.</p> <p>All sample analyses shall be undertaken in accordance with the methods detailed in the latest edition of the "Standard Methods For The Examination Of Water And Waste Water" by A.P.H.A. and A.W.W.A. and W.E.F., or any other method approved in advance by the Council.</p>
Evidence	<p>Port Waikato Water Supply Operation Annual Report 2020 - 2021 (Doc # 21554290).</p> <p>Appendix A Six Monthly Backwash Monitoring Data (Doc # 21551826).</p> <p>Port Waikato Back Wash Data August 2020 (Doc # 17543001).</p>
Status Reasoning	<p>Sampling frequency and reporting to WRC meets condition 8 requirements. August 2020 data was from July 2020 testing that was delayed in the previous reporting period due to the Covid 19 lockdown.</p>
Action Required	Full Compliance
10	<p>The Waikato Regional Council may during 2021, 2026, 2031, 2036, 2041 and 2046 serve notice on the consent holder under section 128(1) of the Resource Management Act 1991, of its intention to review the conditions of this resource consent for the following purposes:</p> <ul style="list-style-type: none"> • to review the effectiveness of the conditions of this resource consent in avoiding or mitigating any adverse effects on the environment and if necessary to avoid, remedy or mitigate such effects by way of further or amended conditions; or • if necessary and appropriate, to require the holder of this resource consent to adopt the best practicable option to remove or reduce adverse effects on the surrounding environment; or • to review the adequacy of and the necessity for monitoring undertaken by the consent holder. <p><i>Advice Note: Costs associated with any review of the conditions of this resource consent will be recovered from the consent holder in accordance with the provisions of section 36 of the Resource Management Act 1991.</i></p>
Evidence	
Status Reasoning	<p>It is recommended that no review of the conditions of this resource consent occur in 2021. WRC considers that the existing conditions of consent are effective in avoiding or mitigating any potential adverse effects of the discharge permit.</p>
Action Required	Not assessed
	Full Compliance
	Authorisation Compliance:

4 SUMMARY OF COMPLIANCE

Based on the conditions selected for monitoring, compliance has been assessed as:

Authorisation	Authorisation Description	Compliance Status
AUTH136297.01.01	To take water from the Maraetai Stream	Low Risk Non-Compliance
AUTH136297.02.01	Dam the Maraetai Stream for the purposes of public water supply and the associated diversion of water	Not assessed
AUTH136297.03.01	To discharge backwash water from the water treatment plant to the Maraetai Stream	Full Compliance

Overall Site Compliance: Low Risk Non-Compliance

5 DISCUSSION AND CONCLUSIONS

Waikato District Council have attained a compliance status of Low Risk Non-Compliance for the 2020/2021 monitoring period.

The compliance status results from the identified exceedance of condition 5, AUTH136297.01.01.

The consent holder has submitted EIR's in respect of the exceedance of condition 5 of AUTH136297.01.01, for both the prior and current monitoring period. Additionally, outstanding backwash sampling results from July 2020 were submitted to WRC in August 2020. The latter was delayed due to the April 2020 Covid 19 lockdown.

6 SUMMARY OF ACTIONS REQUIRED

The following actions are required to be undertaken:

Resource consent	Condition Number	Action Required
AUTH136297.01.01	5	Implement further actions identified in EIR; warning alarm to be generated when abstraction total is nearing consented volume.
AUTH136297.01.01	6	Please forward a copy of the 2021 Port Waikato inflow meter Calibration Certificate to WRC once available.

7 RECOMMENDATIONS FOR WAIKATO REGIONAL COUNCIL

I recommend that this be a Focus Area 2, Priority 2 site for monitoring purposes and that this site be audited again in the 2021/2022 year to ensure that the above identified actions are completed.



Brent Vyle
Resource Officer - Resource Use
Resource Use

Date: 16 August 2021

7.1 Decision

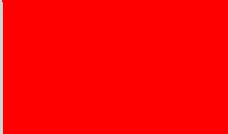
I have reviewed this audit report and agree with the recommendations.

A handwritten signature in black ink, appearing to read 'Hugh Keane', is centered within a light gray rectangular box.

Hugh Keane
Team Leader
Resource Use

Date: 16 August 2021

APPENDIX 1
Compliance Rating System

Compliance Status	Compliance Grade
	Not Assessed
	Full Compliance Full compliance with all relevant consent conditions, plan rules, regulations and national environmental standards.
	Low Risk Non-Compliance Non-compliance with some 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 monitoring report).
	Moderate Non-Compliance Non-compliance with most 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.
	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 a high risk of adverse environmental effects.