



## CONSENT SUMMARY REPORT

Consent Name	Maramarua Wastewater Treatment System
Consent No.	132607
Year	1 July 2023 – 30 June 2024
Date	July 2024

## MARAMARUA WASTEWATER TREATMENT SYSTEM

### ANNUAL REPORT 2023 - 2024

**RC 132607**

The Waikato District Council (WDC) holds a resource consent to discharge treated wastewater to ground from the Maramarua wastewater treatment system. Waikato District Council in conjunction with Watercare Services Limited operates the facility under the resource consents issued by Waikato Regional Council. A new consent was granted on the 15<sup>th</sup> December 2014 and will expire on the 15<sup>th</sup> December 2039.

*Appendix 1 – WWTP Maramarua Data Summary*

*Appendix 2 – Daily rainfall data*

*Appendix 3 – Surface water drain sample results.*

*Appendix 4 – Complaints summary*



**CONSENT SUMMARY REPORT**  
**OPERATIONAL COMMENTS**

*Staff Maintenance Visits:* An operations staff member visits the site at least once a week.

**FUTURE WORKS**

- Disposal field upgrade is finished, and just some minor landscaping left to attend to.
--

<b>EVENT SUMMARY</b>		<b>JULY 2023 – JUNE 2024</b>
2023 - 2024		All events notified to WRC.

<b>COMPLAINTS SUMMARY</b>		<b>JULY 2023 – JUNE 2024</b>
2023 - 2024		Nil received.

## CONSENT SUMMARY REPORT

*To determine compliance with the 90th percentile limits, no more than one sample in any ten consecutive monthly sampling events shall exceed the specified limit.*

Compliance with the discharge quality conditions are summarized in the above table within the Compliance column. The measurement stated in the Compliance column cell indicates the number of test results exceeding the median or 90<sup>th</sup> percentile limit. The shading in the Compliance column cells indicates the state of compliance for each parameter; if the cell is shaded **green** the parameter is compliant, if the cell is shaded **red** the parameter is non-compliant.

Data Summary		Jun-2024	RC105031 - Maramarua					
<b>Outflow Summary Reporting</b>		<b>Daily Limit - 5 m3</b>						
<b>Average Daily Flow</b>		3.2						
<b>Max Daily Flow</b>		33						
<b>90th Percentile Daily Flow</b>		22						
<b>Average Monthly Total</b>		99						
<b>Max Monthly Total</b>		207						
<b>Annual Outflow Total</b>		1,183						
<b>Discharge Monthly Tests</b>		<b>Consent Limits</b>		<b>Measured</b>		<b>Compliance</b>		
<b>Parameters</b>	<b>Unit</b>	<b>Median</b>	<b>90<sup>th</sup>ile</b>	<b>Median</b>	<b>90<sup>th</sup>ile</b>	<b>Median</b>	<b>90<sup>th</sup>ile</b>	
<b>CBOD5</b>	g/m <sup>3</sup>		20.0	1.1	1.7		0 / 12	Compliant
<b>Ammonical Nitrogen</b>	g/m <sup>3</sup>			0.2	1.7			
<b>Nitrate</b>	g/m <sup>3</sup>			42.8	61.0			
<b>Total Suspended Solids</b>	g/m <sup>3</sup>		30.0	3.0	9.6		0 / 12	Compliant
<b>E.Coli</b>	CFU/100ml			370.0	576.0			



**CONSENT SUMMARY REPORT**

**ANNUAL REPORT**  
**JULY 2023 – JUNE 2024**

The Maramarua Wastewater Treatment Plant is expected to operate in compliance with the conditions of Resource Consent 132607. Important matters to note and non-compliances are detailed below against the corresponding consent condition.

A summary of results above attached as Appendix 1 summary spreadsheet.

Conditions Comments	
1	<p><i>The activity authorised by this consent shall be carried out in accordance with the application for this resource consent and as identified in the resource consent conditions below.</i></p> <p><i>The site activity is carried out in accordance with the information contained in the application.</i></p> <ul style="list-style-type: none"> <li>• RC 132607 in effect as of 15/12/2014.</li> </ul>
3	<p><i>The consent holder shall ensure that contractors are made aware of the conditions of this resource consent and ensure compliance with those conditions.</i></p> <ul style="list-style-type: none"> <li>• All contractors employed at the treatment site are inducted in both health and safety procedures and relevant conditions of this consent.</li> </ul>
4	<p><i>The average daily discharge volume of treated wastewater discharged to the Wisconsin Mound shall not exceed 5 m<sup>3</sup> per day. This is to be calculated on a rolling 12-month period basis.</i></p> <ul style="list-style-type: none"> <li>• Compliant - Average daily discharge volume of treated wastewater discharged to the Wisconsin Mound was recorded just over the limit at 3.2 m<sup>3</sup>.</li> </ul>
5	<p><i>The 90<sup>th</sup> percentile daily discharge volume of treated wastewater discharged to the Wisconsin Mound shall not exceed 8 m<sup>3</sup> per day. To determine compliance with the 90<sup>th</sup> percentile limit, no more than 10 percent of daily discharge volume totals shall exceed the specified limits. This is to be calculated on a rolling 12 month period basis.</i></p> <ul style="list-style-type: none"> <li>• Non-Compliant - 90<sup>th</sup> percentile daily flow for July 2023 to June 2024 was measured to be 22 m<sup>3</sup>.</li> </ul>
6(a)	<p><i>The consent holder shall ensure that the quality of the discharge to the Wisconsin Mound shall comply with the following limits:</i></p> <p><i>The 90<sup>th</sup> percentile daily discharge of Carbonaceous Biochemical Oxygen Demand (cBOD) shall not exceed 20 mgL<sup>-1</sup>. To determine compliance with the 90<sup>th</sup> percentile limit, no more than one sample in any ten consecutive monthly sampling events shall exceed the specified limits. This is to be calculated on a rolling basis for the previous 12 month period</i></p> <ul style="list-style-type: none"> <li>• Compliant - The 90<sup>th</sup> percentile value was calculated to be 1.7 mg/L.</li> </ul> <p><i>The 90<sup>th</sup> percentile daily discharge of Suspended Solids (SS) shall not exceed 30 mgL<sup>-1</sup>. To determine compliance with the 90<sup>th</sup> percentile limit, no more than one sample in any ten consecutive monthly sampling events shall exceed the specified limits. This is to be calculated on a rolling basis for the previous 12 month period.</i></p> <ul style="list-style-type: none"> <li>• Compliant - The 90<sup>th</sup> percentile value was calculated to be 9.6 mg/L</li> </ul>

## CONSENT SUMMARY REPORT

Conditions Comments	
6(b)	<p><i>The consent holder shall determine the concentration of wastewater contaminants in the treated wastewater discharged to land by collecting samples for analysis at a point prior to the application to the Wisconsin Mound for the following determinants:</i></p> <ol style="list-style-type: none"> <li>1. Nitrate Nitrogen (NO<sub>3</sub>-N)</li> <li>2. Ammoniacal Nitrogen (NH<sub>4</sub>-N)</li> <li>3. Escherichia coli (E. coli)</li> <li>4. Suspended Solids (SS)</li> <li>5. Carbonaceous Biological Oxygen Demand (cBOD)</li> </ol> <p><i>Samples should be collected on a monthly basis (12 samples per year) this sampling frequency can be reduced after two years' worth of samples if the consent holder applies to Waikato Regional Council in writing.</i></p> <ul style="list-style-type: none"> <li>• Please see the attached Appendix 1 summary spreadsheet. 12 months of data has been collected to this point.</li> <li>• Nitrate: Measured 90%ile = 61 mg/L</li> <li>• Ammoniacal Nitrogen: Measured 90%ile = 1.7 mg/L</li> <li>• E.coli: Measured 90%ile = 576 cfu/100ml</li> <li>• Carbonaceous Biological Oxygen Demand (cBOD): Measured 90%ile = 1.7 mg/L</li> <li>• Suspended Solids (SS)s: Measured 90%ile = 9.6 mg/L</li> </ul>
7	<p><i>The discharge shall be uniformly distributed over the wastewater disposal area (Wisconsin Mound)</i></p> <ul style="list-style-type: none"> <li>• Disposal mound is regularly inspected.</li> </ul>
8	<p><i>The consent holder shall ensure that the wastewater treatment and disposal system is properly operated and maintained at all times.</i></p> <ul style="list-style-type: none"> <li>• The site is regularly attended and inspected.</li> <li>• Construction and upgrade works for the disposal field have commenced.</li> </ul>
9	<p><i>As a result of the operation of the wastewater treatment plant the discharge shall not result in odour that is objectionable to the extent that it causes an adverse effect at/or beyond the boundary of the subject property.</i></p> <ul style="list-style-type: none"> <li>• Council's CRM database records all complaints from the public. There were no odour complaints from the public during the consent year regarding the Maramarua WWTP.</li> </ul>
10	<p><i>The consent holder shall retain and update as necessary the Operation and Management Plan for the site.</i></p> <ul style="list-style-type: none"> <li>• An Operations &amp; Management Plan is retained for this site. The Maramarua Operations &amp; Management Plan was subjected to an initial review by the Watercare team and is attached in the 2021-2022 Annual Report.</li> <li>• Planning is underway with a wastewater to conduct a detailed review and update of the Maramarua Operation &amp; Management Plan.</li> </ul>

## CONSENT SUMMARY REPORT

Conditions Comments	
11	<p><i>There shall be no overland flow or ponding of wastewater from the treatment system.</i></p> <ul style="list-style-type: none"> <li>The whole of filter bed media has been replaced and all under drains were cleaned during March 2020.</li> </ul>
12	<p><i>That the works programme contained in the Maramarua Wastewater Network Inflow ; and Infiltration Investigation (Waikato Regional Council EDRM #3065271) be incorporated into an updated Operations &amp; Management Plan for the plant within 6 months of the commencement of this consent.</i></p> <ul style="list-style-type: none"> <li>Inflow and infiltration investigation report incorporated into the Operations &amp; Maintenance Plan.</li> </ul>
13	<p><i>The consent holder shall keep a written record of all maintenance that is undertaken on the system and these records shall be made available to the Waikato Regional Council within 10 working days of request.</i></p> <ul style="list-style-type: none"> <li>Routine maintenance checks are carried out on the wastewater system and any problems noted.</li> <li>Site visits were undertaken at least fortnightly through the reporting period.</li> <li>Details of faults and any work carried out are recorded in Water Outlook.</li> </ul>
14	<p><i>The consent holder shall ensure that a flow meter is available to record the quantity of effluent discharged on a cumulative daily basis. The meter shall have a reliable calibration to flow, which shall be maintained to an accuracy of +/- 5%. The meter shall be read at the same time of the same day, once per week, that the site is occupied. Access to the meter shall be available to Waikato Regional Council staff at all reasonable times.</i></p> <ul style="list-style-type: none"> <li>The flow is recorded daily via telemetry. Summary spreadsheet attached as Appendix 1.</li> <li>A new outflow meter was installed in May 2022.</li> </ul>
15	<p><i>The consent holder shall provide to the Waikato Regional Council a written report by 30 September each year. addressing the following:</i></p> <ol style="list-style-type: none"> <li><i>A summary of the wastewater and freshwater monitoring results required by conditions of this resource consent for the year ending 30 June;</i></li> <li><i>Critically analyse the monitoring data collected and comment on any emerging trends;</i></li> <li><i>Comment on compliance with the conditions of this resource consent;</i></li> <li><i>Any reasons for non-compliance or difficulties in achieving compliance with the conditions of this resource consent and a description of and a summary of the efficacy of any remedial works undertaken;</i></li> <li><i>Any other issue considered relevant to the consent holder.</i></li> </ol> <ul style="list-style-type: none"> <li>This report is submitted in compliance with this condition.</li> </ul>
16	<p><i>The consent holder shall record the daily rainfall at this site and report the rainfall figures as part of their monthly and annual reports to Waikato Regional Council.</i></p> <ul style="list-style-type: none"> <li>Rainfall data from Water Outlook attached as Appendix 2 to this report.</li> <li>The Watercare team are reviewing compliance platforms and monthly reporting. Once complete rainfall data may be added to an automated monthly report.</li> </ul>

## CONSENT SUMMARY REPORT

Conditions Comments	
17	<p><i>The consent holder shall undertake annual monitoring of the surface water drains at the following points <b>NZTM 179541BE 5875477N (Coalfields Road) and NZTM 1795452E and 5375491N (Kopuku Lane) and the on-site bore within the WWTP at NZTM 1795430E 5875-t91N</b> at a suitable time when there is flow within the drains. The sample should be analysed for the same determinants as listed in condition 6 above.</i></p> <ul style="list-style-type: none"> <li>• Sampling has been completed for the Coalfields Road and Kopuku Lane surface water drains and results are attached as Appendix 3.</li> <li>• No on-site bore has been identified by the Production team at the documented consent coordinates. The consent sampling plan on-site bore location is not consistent with the WRC online bores map. A bore is located in a neighbouring property. Watercare will seek clarification from WRC on the correct bore to be sampled.</li> </ul>
18	<p><i>The consent holder shall forward the results of the monitoring undertaken pursuant to conditions 4, 5, 6 and 19 to the Waikato Regional Council, via electronic means, within one month of receipt of the results by the consent holder.</i></p> <ul style="list-style-type: none"> <li>• Monthly reports forwarded to WRC with comments/investigation details included for any non-compliances observed.</li> </ul>
19	<p><i>The consent holder shall notify the Waikato Regional Council within 24 hours (where practicable) of the consent holder becoming aware of the limits specified in conditions 4, 5 and 6 of this resource consent being exceeded, or any accidental discharge, plant breakdown or other circumstance which is likely to result in the limits of this consent being exceeded. The consent holder shall, within 10 working days of the incident occurring, provide a written report to the Waikato Regional Council, identifying the breach, possible causes and steps to ensure future compliance.</i></p> <ul style="list-style-type: none"> <li>• All incidents are notified to WRC as required.</li> </ul>
20	<p><i>The consent holder shall maintain and keep a complaint register for all aspects of all operations at the site. The register shall detail the date, time, duration and type of complaint, cause of the complaint, and action taken by the consent holder in response to the complaint. The consent holder shall forward to the Council a copy of all complaints received as soon as practicable. The register shall be made available to the Council upon request at any reasonable time and a copy shall be forwarded to the Waikato Regional Council by 30 September each year.</i></p> <ul style="list-style-type: none"> <li>• Councils CRM database records all complaints from the public. No complaints were received for the Maramarua WWTP. Appendix 4 is attached as evidence of a complaints register.</li> </ul>
21	<p><i>The Waikato Regional Council may during 2019, 2024, 2029 and 2034 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:</i></p> <ul style="list-style-type: none"> <li>• to review the effectiveness of the conditions of these resource consents 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</li> <li>• 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</li> <li>• to review the adequacy of and the necessity for monitoring undertaken by the consent holder.</li> </ul>



**CONSENT SUMMARY REPORT**