



# Omaha Wastewater Treatment Plant 2024-2025 Annual Report

Final - September 2025

Watercare 


## QUALITY INFORMATION

<b>Document</b>	Annual Report
<b>Date</b>	30 September 2025
<b>Name and position of originator</b>	Laurent Daghdvirenian, Senior Environmental Scientist

## REVISION HISTORY

Rev	Revision Date	Name	Position	Signature
1	15/09/2025	Michiel Jonker	Environmental Care Manager	
4	30/09/2025	Jonathan Piggot	Head of Wastewater	

## APPROVED

Date	Name	Position	Signature
30/09/2025	Michiel Jonker	Environmental Care Manager	

## CONSENT CHANGE AND MONITORING HISTORY

Change type	Description	Effective date	Reference / condition	Reporting / monitoring implications
Consent grant	Discharge to land (Jones Road – DIS60050490), discharge to land (Omaha Golf Course – DIS60050606), discharge to air (DIS60050574), and land use consent (LUC60012037) granted for WWTP operation	21-Jun-17	Decision BUN20454939, REG-67919/21/23	Established baseline conditions, monitoring framework, and management plan requirements
Consent duration	Discharge permits expire 20 March 2052 (35-year duration)	20 March 2017 – 20 March 2052	Condition 18	Long-term monitoring and reporting obligations apply throughout term
Environmental Management Plan (EMP)	EMP required within 6 months of commencement	2017	Condition 12	Integrates all operational, monitoring, and reporting requirements; must be updated and approved when amended
Management plans	Initial Midge Management Plan (Sept 2017) and Odour Management Plan (Aug 2017) prepared and certified	2017	Conditions 37 & 49	Ongoing monitoring of odour and midges; annual reporting of incidents/complaints
Ground and Surface Water Monitoring Plan	Certified (Feb 2017)	2017	Condition 29	Quarterly monitoring (with provision to reduce to 6-monthly after 5 years, subject to Council agreement)
UV dose requirement	Updated microbial risk assessment supported adoption of 40 mJ/cm <sup>2</sup> UV dose; approved by Council	Jul-22	Condition 24	UV dose monitoring incorporated into daily compliance checks; reported annually
Five-yearly assessments	Water quality, soil quality, ecological monitoring, and emerging contaminants assessments completed in 2021–2022 (fifth anniversary cycle)	Sept-22	Conditions 17, 31, 42, 43	Next round due in 2026–2027; findings incorporated into annual report
Consultative Group	Omaha WWTP Consultative Group established, annual meetings ongoing	From 2017 (ongoing, latest in Aug 2024)	Condition 7	Minutes and annual reports circulated to Council and stakeholders
Annual Performance Reports	Submitted annually by 30 September	Ongoing (latest: Sept 2025)	Condition 16	Collates monitoring results, compliance summary, trends, complaints/incidents
Recent upgrades	Blower programme changes, RAS airlift pump upgrade, lagoon diffuser replacement, supplementary effluent tank installed	2022–2023	Reported under Condition 16	Operational improvements to support nutrient removal and irrigation reliability
Planned changes	Lagoon/pond desludging, temporary supplementary ultrafiltration, retention dam stability analysis	2025 (next reporting period)	Reported under Condition 16	Future monitoring of dam stability and effluent quality impacts
Consent grant	Discharge to land (Jones Road – DIS60050490), discharge to land (Omaha Golf Course – DIS60050606), discharge to air (DIS60050574), and land use consent (LUC60012037) granted for WWTP operation	21-Jun-17	Decision BUN20454939, REG-67919/21/23	Established baseline conditions, monitoring framework, and management plan requirements
Consent duration	Discharge permits expire 20 March 2052 (35-year duration)	20 March 2017 – 20 March 2052	Condition 18	Long-term monitoring and reporting obligations apply throughout term

## EXECUTIVE SUMMARY

The 2024-2025 Annual Compliance Report for the Omaha Wastewater Treatment Plant (WWTP) outlines the plant's operational performance, and monitoring results from July 1, 2024, to June 30, 2025.

This report evaluates the plant's performance against resource consent conditions, particularly in terms of effluent quality and discharge volumes.

Key highlights from the reporting year include:

- **Effluent volumes:** The plant's discharge remained compliant within daily and cumulative limits at both its Jones Road and Omaha golf course irrigation fields.
- **Effluent quality:** The Omaha WWTP maintained compliance with its effluent quality parameters. All monitored parameters, including ammoniacal nitrogen, nitrate, E. coli, BOD, and TSS, met consent standards. Medians and 92nd percentiles were well within limits.
- **UV treatment:** The approved UV dose of 40 mJ/cm<sup>2</sup> was consistently achieved, through the reporting period.
- **Groundwater monitoring:** Levels remained below the 0.2 m compliance threshold. No new shallow groundwater users were identified.
- **Incidents:** no incidents were recorded during the reporting period.
- **Air quality:** Weekly odour walkovers recorded no noxious, offensive, or objectionable effects beyond the boundary.
- **Plant upgrades and future changes:**
  - Install a permanent ultrafiltration system to expand the plant's filtering capacity alongside the sand filter; final design is underway with delivery expected in 2026.
  - Watercare is preparing a new WWTP facility plan to address future maintenance, upgrades, retention dam stability works, and irrigation system development.

**Overall compliance:** Category 1 across all conditions. The plant met its compliance obligations, with no significant incidents or complaints reported during the year. Air quality monitoring confirmed full compliance with consent conditions for odour and emissions. The plant received a Category 1 compliance rating for the period.

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## 1 INTRODUCTION

### 1.1 Outline

This report covers resource consent compliance for the Omaha wastewater treatment plant (WWTP) from 1 July 2024 to 30 June 2025. The report includes:

- Relevant consents and management plans;
- Description of the WWTP;
- Plant performance; and
- Summary of compliance.

### 1.2 Consents and Plans

#### 1.2.1 Consents

Table 1-1-1 lists the active resource consents for the Omaha WWTP. The site has separate resource consents for the two fields the WWTP irrigates on.

**Table 1-1-1 Omaha WWTP Resource Consents**

Consent type	Consent number	Expiration date
Discharge to Land (64 Jones Road)	DIS60050490	20/3/2052
Discharge to Land (Omaha Golf Club)	DIS60050606	20/3/2052
Discharge to Air (64 Jones Road)	DIS60050574	20/3/2052

#### 1.2.2 Plans

Omaha WWTP has two management plans that relate to its resource consents. Table 1-1-2 lists these plans.

**Table 1-1-2 Omaha WWTP Management Plans**

Plan	Revision Date
Environmental Management Plan	September 2017
Midge Management Plan	September 2017
Odour Management Plan	August 2017
Ground and Surface Water Monitoring Plan	February 2017

### 1.3 Abbreviations

For ease of reading, this report uses abbreviations for some technical terms. Table 1-3 lists these abbreviations.

**Table 1-3 Table of abbreviations**

<b>Abbreviation</b>	<b>Description</b>
cBOD <sub>5</sub>	5-day carbonaceous biochemical oxygen demand
DO	Dissolved oxygen
DRP	Dissolved reactive phosphorus or dissolved soluble phosphorus (synonyms)
E. coli	<i>Escherichia coli</i>
NH <sub>3</sub> -N	Ammonia and ammonium, reported in milligrams nitrogen
NO <sub>2</sub> -N	Nitrite, reported in milligrams nitrogen
NO <sub>3</sub> -N	Nitrate, reported in milligrams nitrogen
TN	Total nitrogen
TP	Total phosphorus
TSS	Total suspended solids
UV	Ultra-violet
Watercare	Watercare Services Limited
WWTP	Wastewater treatment plant

## 2 TREATMENT PLANT

### 2.1 Current operation

The WWTP is a land treatment system that includes:

- Intake Screen
- Aerated lagoon
- Oxidation pond
- Storage basin
- Low rate sand filters
- UV disinfection
- Drip irrigation.

Treated effluent discharges to two irrigation fields: one referred to as Jones Road (17.4 hectares) and a golf course (8.9 hectares). Each irrigation field comprises smaller blocks to allow loading and resting of each irrigation area. Sludge is stored in the ponds before Watercare transports it to a local consented disposal site.

### 2.2 Changes to the treatment plant

#### 2.2.1 2024-2025

Watercare did not make any changes to the WWTP in 2024-2025.

#### 2.2.2 Future changes

The following items are planned for the next reporting period:

Install a permanent ultrafiltration system to expand the plant's filtering capacity alongside the sand filter; final design is underway with delivery expected in 2026.

Watercare is preparing a new WWTP facility plan to address future maintenance, upgrades, retention dam stability works, and irrigation system development.

## 3 COMPLIANCE ASSESSMENT

### 3.1 Introduction

The assessment of the WWTP performance considers:

- Results of required WWTP monitoring.
- Recorded incidents and complaints.

Watercare assesses compliance with consent using the same compliance rating system utilised by the Auckland Council (Table 3-1).

**Table 3-1 Compliance assessment criteria**

Rating	Detail
Category 1	Watercare has complied with the consent condition. Where a consent condition refers to a provision in a Management Plan, then the plan has been referred to in assessing consent compliance.
Category 2	Watercare has not complied with the consent condition. Watercare has assessed the non-compliance as technical or having no more than minor adverse effect.
Category 3	Watercare has not complied with the consent condition. Watercare has assessed the non-compliance having the potential to result in more than minor adverse effects on the environment. Alternatively, since the last audit, there is evidence of repeat Category 2 non-compliance.
Category 4	Watercare has not complied with the consent condition. Watercare has assessed the non-compliance as having the potential to cause significant adverse effects on the environment. Alternatively, since the last audit, there is evidence of repeat Category 3 non-compliance.

### 3.2 Method statement

#### 3.2.1 Monitoring framework

Monitoring of the WWTP is undertaken in accordance with the requirements of the consents DIS60050490, DIS60050606, and DIS60050574. The monitoring programme aligns with the certified Environmental Management Plan (2017) and Ground and Surface Water Monitoring Plan (2017), and includes:

- Routine effluent quality and volume monitoring (Condition 19, 22, 24).
- Groundwater level and quality monitoring (Conditions 17, 29, 35).
- Soil and ecological monitoring at five-yearly intervals (Conditions 31, 42, 43).
- Annual reporting of performance and compliance (Condition 16).

### 3.2.2 Sampling locations and parameters

- Effluent: Treated wastewater samples are collected at the final discharge point prior to irrigation. Parameters include ammoniacal nitrogen (NH<sub>3</sub>-N), nitrate (NO<sub>3</sub>-N), Escherichia coli, biochemical oxygen demand (cBOD<sub>5</sub>), total suspended solids (TSS), pH, dissolved oxygen (DO), total nitrogen (TN), total phosphorus (TP), and dissolved reactive phosphorus (DRP).
- Groundwater: Monitoring bores on and adjacent to the Jones Road and Omaha Golf Course irrigation areas are sampled for nitrogen species, phosphorus, and microbiological indicators.
- Surface water: Drainage channels adjacent to irrigation blocks are monitored at Council-approved sites.
- Groundwater level: Continuous loggers record groundwater depth, with compliance checked against the 0.2-m mounding threshold.

### 3.2.3 Monitoring frequency

- Effluent volumes: Daily flow meters for influent and irrigated discharge volumes, aggregated monthly and annually.
- Effluent quality: Weekly to fortnightly depending on parameter, with rolling medians and 92<sup>nd</sup> percentiles calculated over a 12-month period.
- Groundwater/surface water: Quarterly sampling, with provision to reduce to six-monthly subject to Council approval (Condition 33).
- UV dose: Continuous monitoring of UV intensity and dose, with reporting against the approved 40 mJ/cm<sup>2</sup> standard (Condition 24).
- Soil and ecology: Five-yearly cycles, last undertaken in 2021–2022, next due 2026–2027.

### 3.2.4 Analytical methods

- Laboratory analyses are undertaken by IANZ-accredited laboratories following APHA and ISO methods.
- Detection limits meet or exceed those required by consent conditions.
- Results are reported in mg/L for nutrients and solids, and cfu/100 mL for microbiological indicators.

### 3.2.5 Data management

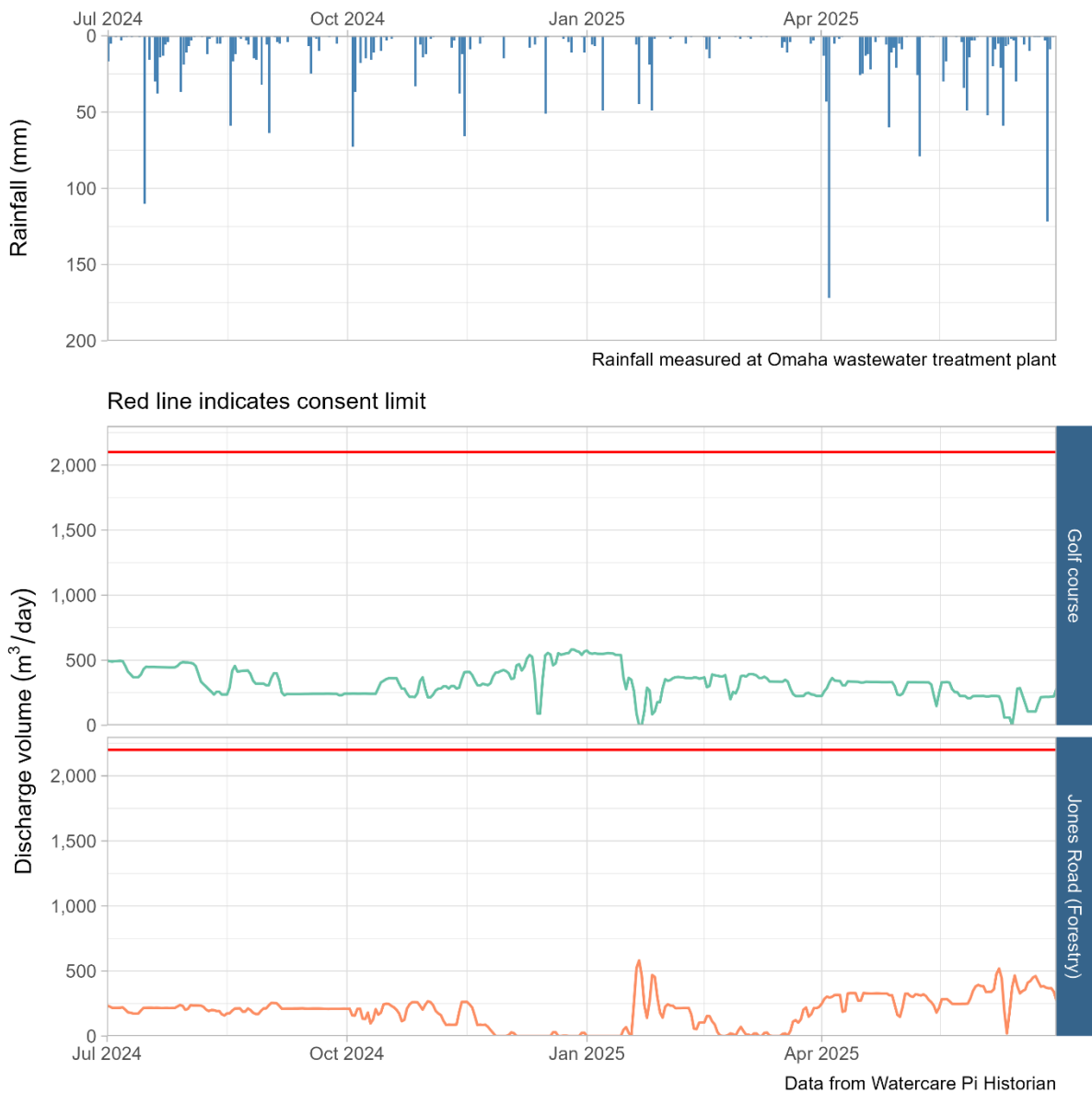
- Field sampling follows standardised protocols for sample collection, preservation, and transport (chain of custody forms, chilled storage).
- Flow meters and UV sensors are calibrated at intervals consistent with manufacturer recommendations and consent conditions.
- Data are stored in Watercare's environmental monitoring database.

### 3.3 Plant performance

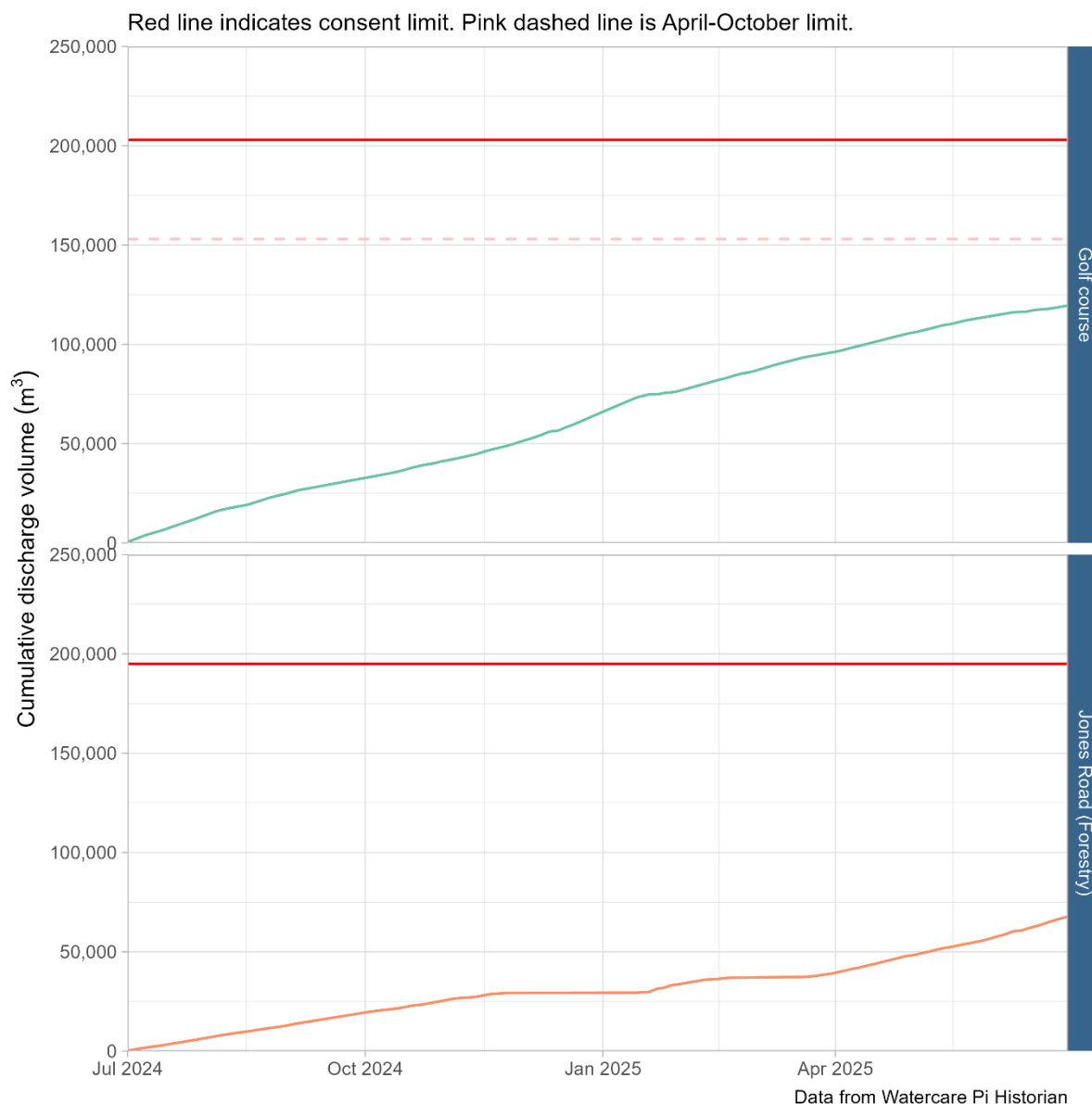
#### 3.3.1 Effluent volumes

Figure 3-1 provides daily discharge volumes for the Jones Road and Golf Course irrigation areas in 2024-2025. Figure 3-1 provides the cumulative volume of treated effluent discharged onto the two irrigation fields. Table 3-2 summarises effluent discharged for both irrigation areas compared with daily, yearly volume limits and volume limits for the golf course from 1 July 2024 to 30 June 2025.

Total effluent irrigated during the reporting year was 187,262 m<sup>3</sup>, lower than the previous reporting period (207,064 m<sup>3</sup>).



**Figure 3-1 WWTP effluent volumes and rainfall – 2024-2025.**



**Figure 3-2 WWTP cumulative effluent volumes - 2024-2025.**

**Table 3-2 Summary of effluent volumes for the Omaha WWTP (2024-2025)**

Maximum Discharge Volumes (condition 19)	Units	Maximum	Consented Maximum	Compliant
Maximum Discharge Volume (Jones Road)	m <sup>3</sup> /day	581	2,200	Yes
Total Discharge Volume (Jones Road) 1 July to 30 June	m <sup>3</sup>	67,669	195,000	Yes
Maximum Discharge Volume (Golf Course)	m <sup>3</sup> /day	582	2,100	Yes
Total Discharge Volume (Golf Course) 1 July to 30 June	m <sup>3</sup>	119,669	203,000	Yes

### 3.3.2 Effluent quality

Table 3-3 and Table 3-4 Summary of effluent monitoring for the Omaha WWTP (2024-2025) are a summary of effluent quality. The results shown in both tables indicate that the WWTP met its compliance criteria for all parameters in 2024-2025. Raw data are in Appendix A-1.

**Table 3-3 Summary of effluent quality standards monitoring for the Omaha WWTP (2024-2025)**

Water quality parameter	Limit	12-month rolling median				Compliant
		Quarter 1	Quarter 2	Quarter 3	Quarter 4	
Ammoniacal nitrogen (g N/m <sup>3</sup> )	20			1.6		Yes
Nitrate (g N/m <sup>3</sup> )	20			9.1		Yes
Escherichia coli (cfu/100 mL)	<2			≤1.6		Yes
		<b>92<sup>nd</sup> percentile</b>				
	Limit	Quarter 1	Quarter 2	Quarter 3	Quarter 4	
Biochemical oxygen demand (mg/L)	30	1.4	3.0	2.5	2.1	Yes
Ammoniacal nitrogen (g N/m <sup>3</sup> )	35	0.4	0.8	0.1	0.7	Yes
Nitrate (g N/m <sup>3</sup> )	30	10.0	10.4	10.8	10.5	Yes
Escherichia coli (cfu/100 mL)	250	1.6	1.6	1.6	1.6	Yes

**Table 3-4 Summary of effluent monitoring for the Omaha WWTP (2024-2025)**

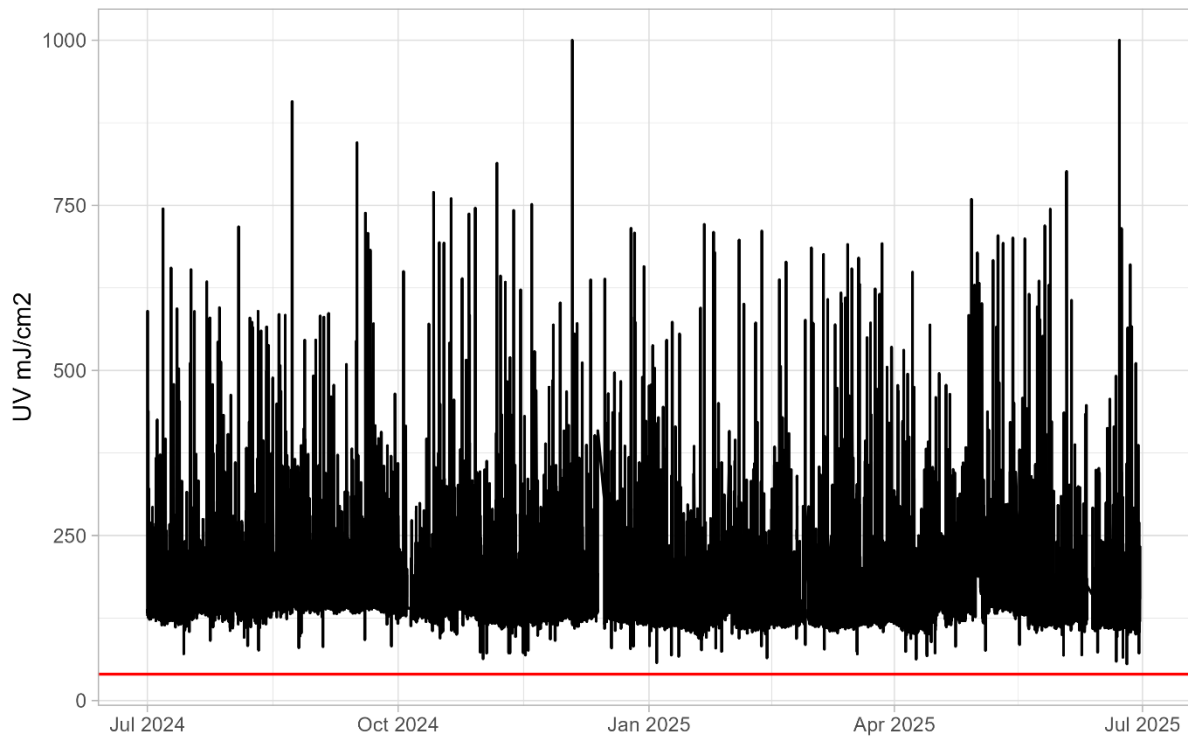
Parameter	Units	n	Average	Range	Median	92 <sup>nd</sup> Percentile
pH	-	50	6.9	6.5-8.0	6.8	7.2
DO	mg O <sub>2</sub> /L	50	8.4	6.8-10	8.2	9.6
TSS	mg/L	27	5.4	1.0-13	4.4	11.8
TN	mg/L	50	13.0	12-16.1	12.4	15.9
TP	mg/L	27	0.9	0.04-4.9	0.6	2.0
DRP	mg/L	27	0.7	0.01-4.3	0.7	1.8

**UV Dose Rate**

Condition 24 requires Watercare to propose a specific UV dose to achieve an appropriate log reduction in viruses to minimise the risk to public health (if any). Watercare proposed a UV dose rate of 40 mJ/cm<sup>2</sup> as supported by an updated microbial risk assessment prepared by Tonkin & Taylor in November 2021. The UV dose rate was approved by Auckland Council in July 2022.

Figure 3-3 provides the effluent daily UV dose rate for the WWTP in 2024-2025.

Over the reporting period the treatment plant met its compliance requirements.



**Figure 3-3 UV Dose rate – 2024-2025.**

### 3.3.3 Air quality

The WWTP received no odour complaints in 2024-2025.

## 3.4 Receiving environment monitoring

### 3.4.1 Soil quality

As part of condition 33 (DIS60050606 / REG-67923), the soil quality monitoring was conducted in 2021-2022 by Manaaki Whenua. Next report will be due in 2026-2027.

### 3.4.2 Ecological monitoring

As per condition 43 of the consents, ecological monitoring is required by 30 September of the fifth anniversary of the commencement of this consent and at five yearly intervals thereafter.

The comprehensive report was provided as part of the annual report 2021-2022. Next report will be due in 2026-2027.

### 3.4.3 Groundwater and surface water quality

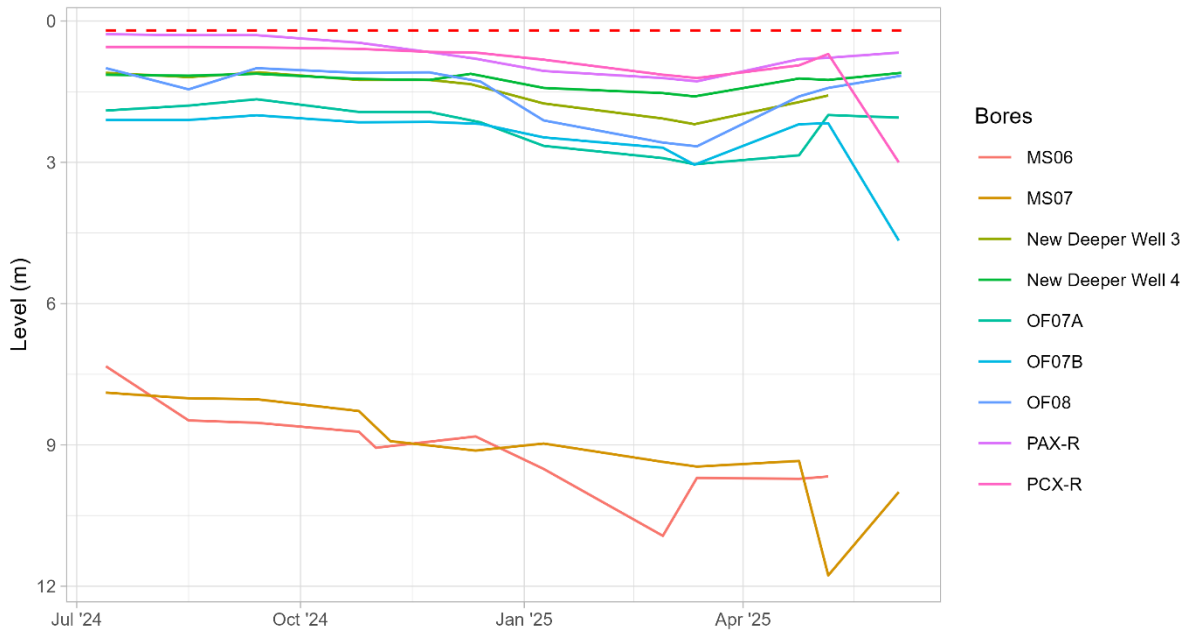
As per condition 17 of the consents, a review of ongoing groundwater and surface water quality is required by 30 September of the fifth anniversary of the commencement of this consent and at five yearly intervals thereafter.

The comprehensive report was provided as part of the annual report 2021-2022. Next report will be due in 2026-2027.

#### Groundwater level monitoring plan

Figure 3-4 presents a summary of the groundwater level monitoring data during the period of 2024-2025.

Groundwater levels remained consistently below the 0.2-meter threshold throughout the reporting period.



**Figure 3-4 Groundwater level monitoring data, 2024-2025. Dotted line represents the 0.2 meter compliance threshold.**

### 3.4.4 Shallow groundwater users

As far as we are aware, there are no new shallow groundwater users in the Jones Road or Omaha Township areas down-gradient of the treated wastewater discharge.

## 3.5 Complaints and incidents

Watercare received no official complaints regarding the operation and maintenance of the WWTP for this reporting year.

## 3.6 Summary of compliance

Table 4-1 General Conditions (DIS60050490, DIS60050606, and DIS60050574) and Table 4-2 Consent Conditions Omaha WWTP Discharge to Air – 64 Jones Road (#DIS60050574) list a condition-by-condition assessment of compliance for the Omaha WWTP. Across all consents, the plant was **Category 1** in 2024-2025.

## 4 CONCLUSION

The 2024-2025 compliance period for Omaha WWTP has demonstrated effective compliance with all resource consent conditions. The plant consistently operated within its minimum discharge limits for both effluent quality and volumes. All effluent monitoring results, including those for key parameters such as BOD, ammonia, nitrate, and E. coli remained within consented standards.

Air quality monitoring showed full compliance with the discharge consent conditions, with no odour or emissions issues reported.

**Table 4-1 General Conditions (DIS60050490, DIS60050606, and DIS60050574)**

Condition Number	General Conditions (DIS60050490, DIS60050606, and DIS60050574)	Compliance Rating	Comment
01	The activity is to be carried out in accordance with the plans and all information submitted with the application, detailed below, and all referenced by the Council as consent numbers DIS60050490 - Discharge to Land (64 Jones Road), DIS60050574 – Discharge to Air (64 Jones Road) and DIS60050606 – Discharge to Land (Omaha Golf Club), LUC60012037 (Regional Land Use at 64 Jones Road) and BUN20454939 (bundled reference): <ul style="list-style-type: none"> <li>• Application form and Assessment of Environmental Effects prepared by Mitchell Partnerships Limited, dated June 2016 and all associated technical reports prepared on behalf of Watercare Services Ltd;</li> <li>• Section 92 response from Watercare Services Limited dated 8 November 2016; and</li> <li>• Section 92 response from Watercare Services Limited dated 6 December 2016.</li> </ul>	1	
02	Pursuant to section 125 of the RMA, this consent will lapse five years after the date it is granted unless: <ol style="list-style-type: none"> <li>a.The consent is given effect to; or</li> <li>b.On application the Council extends the period after which the consent will lapse.</li> </ol>	1	
03	The consent holder must pay the Council an initial consent compliance monitoring charge of \$1200 (GST inclusive), plus any further monitoring charge or charges to recover the actual and reasonable costs incurred to ensure compliance with the conditions of this consent/s.	1	
04	In the event of any conflict between the document listed in condition 1 and the conditions of this consent, the conditions will prevail.	1	
05	The consent holder is to ensure that all staff and contractors undertaking works on site are aware of, and comply with, all conditions of this consent.	1	Ongoing
06	The servants or agents of the Council are to be permitted to have access to the relevant parts of the properties at 64 Jones Road and the Omaha Beach Golf Club at all reasonable times for the purpose of carrying out monitoring procedures, inspections, surveys, investigations, tests, measurements or to take samples while adhering to the consent holder's health and safety policies.	1	

Condition Number	General Conditions (DIS60050490, DIS60050606, and DIS60050574)	Compliance Rating	Comment
07	<p>Community Consultation</p> <p>Within three months of the consent commencing the consent holder is to invite representatives of stakeholders with a specific interest in the Omaha Wastewater Treatment Plant and/or the Whangateau Harbour and all submitters on the resource consent applications described in condition 1 to participate in an Omaha Wastewater Treatment Plant Consultative Group (“Omaha WWTP Consultative Group”).</p> <p>a. The purposes of the Omaha WWTP Consultative Group, the meetings that will be held with the Omaha WWTP Consultative Group, and the consent holder’s obligations to the Omaha WWTP Consultative Group are:</p> <ul style="list-style-type: none"> <li>i. To discuss plant operation, performance, complaints, investigations and planned upgrade works, and the effects or potential effects of these on the community and receiving environment, including the Whangateau Harbour;</li> <li>ii. To make recommendations to the consent holder and/or the Council (Team Leader - Northern Monitoring) on appropriate changes to the monitoring framework to understand the effects of the Omaha Wastewater Treatment Plant on the receiving environment better;</li> <li>iii. To discuss updates on issues that have been resolved;</li> <li>iv. To discuss trends in wastewater treatment volume increases and ways in which volumes beyond those authorised by this consent will be treated and disposed of; and</li> <li>v. To discuss any new developments in the area, including whether there are any new users of shallow groundwater in the Jones Road and Omaha township areas down-gradient of the treated wastewater discharge, and whether any new users of groundwater are envisaged;</li> <li>vi. A process for informing new users of shallow groundwater in the area down-gradient of the discharge activities and possible effects on the groundwater;</li> <li>vii. To consider other issues raised by the Omaha WWTP Consultative Group or the consent holder.</li> </ul> <p>b. At least once a year, the consent holder is to invite the Council (Team Leader - Northern Monitoring) and the Omaha WWTP Consultative Group to a meeting to discuss matters relating to the exercise and monitoring of this consent. At this time the consent holder is to provide information on matters relating to the exercise and monitoring of this consent and the proposed work programme for the following 12 months. The information must be provided to the Omaha WWTP Consultative Group sufficiently in advance of the meeting so that the Omaha WWTP Consultative Group has time to review and to consider it.</p> <p>c. The consent holder is to keep minutes of the meetings held in accordance with clause (b) and to forward them to all attendees within one month of the meeting being held.</p> <p>d. The consent holder is to provide final electronic copies of the reports prepared in accordance with the conditions of this consent to the Omaha WWTP Consultative Group concurrently with them being submitted to the Council (Team Leader - Northern Monitoring).</p>	1	Meeting held in August 2024.

Condition Number	General Conditions (DIS60050490, DIS60050606, and DIS60050574)	Compliance Rating	Comment
08	<p>The consent holder is to send copies of the following reports to the Omaha Beach Golf Club Head Greenkeeper concurrently with them being submitted to the Council (Team Leader - Northern Monitoring):</p> <ul style="list-style-type: none"> <li>a. Surface Water and Groundwater Monitoring Programme;</li> <li>b. Groundwater Level Monitoring Plan;</li> <li>c. Soil Monitoring Assessment;</li> <li>d. Annual Performance Report; and</li> <li>e. Five Yearly Water Quality Monitoring Review.</li> </ul>	1	
09	<p>Complaint reporting and processes            All complaints received by the consent holder about the discharges must be logged immediately. The information is to include:</p> <ul style="list-style-type: none"> <li>a. The date, time, location and nature of the complaint;</li> <li>b. Name, phone number and address of the complainant unless the complainant wishes to remain anonymous;</li> <li>c. Action taken to remedy the problem;</li> <li>d. Any equipment failure and remedial action taken;</li> <li>e. The weather conditions at the time of the complaint including estimates</li> <li>f. The date and name of the person making the entry.</li> </ul>	1	No complaints received
10	<p>Details of any complaints received that affect the consent holder's ability to comply with the conditions of consent must be provided to the Council (Team Leader - Northern Monitoring) within 24 hours of receipt of the complaint(s) or on the next working day. All other complaints are to be provided in the Annual Report required by condition 16.</p>	1	

Condition Number	General Conditions (DIS60050490, DIS60050606, and DIS60050574)	Compliance Rating	Comment
11	<p>Review</p> <p>The conditions of this consent may be reviewed by the Council (Team Leader - Northern Monitoring) pursuant to section 128 of the Act, by giving notice pursuant to section 129, on the anniversary of the commencement of these consents and subsequently at annual intervals thereafter in order to:</p> <p>a. To deal with any significant adverse effects on the environment arising from the exercise of the consent, which was not foreseen at the time the application was considered and which is appropriate to deal with at the time of review; and / or</p> <p>b. To consider the adequacy of conditions that prevent nuisance and adverse effects beyond the boundary of the site particularly if regular or frequent complaints have been received and validated by a Council enforcement officer; and / or</p> <p>c. To consider developments in technology and management practices that would enable practical reductions in the discharge of contaminants; and / or</p> <p>d. To alter the monitoring requirements, including requiring further monitoring, or increasing or reducing the frequency of monitoring.</p>		
12	<p>NOTE - SEE ATTACHED PDF FOR COMPLETE CONDITION</p> <p>Environmental Management Plan</p> <p>The consent holder is required to prepare an Environmental Management Plan, the purpose of which is to integrate operational practices, environmental monitoring programmes and reporting results required by the conditions of these consents. As a minimum, the Environmental Management Plan is to include the following matters:</p> <p>Reticulated Area and Location of Existing and Proposed Irrigation Lines</p> <p>Inspection and Maintenance</p> <p>Treated Wastewater and Receiving Environment Monitoring and Reporting</p> <p>Responding to complaints</p>	1	Environmental Management Plan in September 2017
13	<p>The Environmental Management Plan is to be submitted to the Council (Team Leader, Northern Monitoring) for approval in a certifying capacity within six months of the consents commencing, except for those parts to be approved pursuant to conditions 29, 31 to 33, 35, 37 and 49 which are to be submitted in accordance with the timeframes required by each of those conditions.</p>	1	Plan approved in September 2017

Condition Number	General Conditions (DIS60050490, DIS60050606, and DIS60050574)	Compliance Rating	Comment
14	The Environmental Management Plan must be to a standard acceptable to the Council (Team Leader - Northern Monitoring). The consent holder is to undertake the requirements of the certified Environmental Management Plan. Any amendments to the EMP are to be approved by the Council (Team Leader -Northern Monitoring) prior to implementation and all subsequent significant updates to the Environmental Management Plan throughout the term of this consent are to be submitted to the Council (Team Leader - Northern Monitoring) for approval in a certifying capacity.	1	Plan approved in September 2017
15	The Environmental Management Plan is to be sent to the Omaha WWTP Consultative Group within six months of commencement of these consents.	1	Plan approved in September 2017
16	<p>Reporting conditions</p> <p>An Annual Performance Report is to be submitted to the Council (Team Leader- Northern Monitoring) by the consent holder by September 30 of each year. The Annual Performance report must:</p> <ul style="list-style-type: none"> <li>a. Collate, analyse and interpret all relevant data and information pertaining to this consent for the previous year from 1 July to 30 June;</li> <li>b. Include comment on general plant performance and any trends in changes in the discharge volume and/or the discharge quality standards over time;</li> <li>c. Include consideration of compliance with each consent condition and an evaluation against the Auckland Council's standard compliance scoring protocol;</li> <li>d. Identify any actions required and submit a timetable to rectify any non-compliance; and</li> <li>e. Include a review of any new or envisaged shallow groundwater users in the Jones Road or Omaha Township areas down-gradient of the treated wastewater discharge authorised by this consent, and how those users may be affected by the discharge.</li> </ul>	1	Ongoing

Condition Number	General Conditions (DIS60050490, DIS60050606, and DIS60050574)	Compliance Rating	Comment
17	<p>The consent holder is to engage an appropriately qualified person to assess the water quality monitoring undertaken as part of these consent conditions by 30 September of the fifth anniversary of the commencement of this consent and subsequently at five yearly intervals thereafter.</p> <p>As a minimum this assessment is required to include:</p> <ul style="list-style-type: none"> <li>a. A report on any trends in the concentration of parameters measured in the treated wastewater, surface drains and groundwater bores;</li> <li>b. An assessment of correlation between contaminants in the discharged wastewater and concentration of those contaminants in down-gradient monitoring bores at the discharge areas;</li> <li>c. An assessment of the magnitude of the impact of the discharge on groundwater together with an assessment of the effect on any groundwater users;</li> <li>d. In combination with the results of coastal water quality monitoring undertaken by the Auckland Council, an assessment of whether there is any evidence of nutrients from the discharged wastewater affecting the water quality of the Whangateau Harbour and Omaha Bay in sufficient quantities to cause deterioration of harbour water quality; and</li> <li>e. Review recorded concentrations in treated wastewater and from the monitoring undertaken in accordance with condition 33 and assess whether an appropriate trigger level should be set for phosphorus levels in treated wastewater discharged to the environment. <p>The assessment required by this condition is to be to a standard acceptable to the Council (Team Leader - Northern Monitoring) and is to be forwarded to the Council (Team Leader - Northern Monitoring) and the Omaha Wastewater Treatment Plant Consultative Group by 30 September of each year that it is required.</p> </li></ul>	1	Assessment undertaken by Tonkin & Taylor in 2021-2022

**Table 4-2 Consent Conditions Omaha WWTP Discharge to Air – 64 Jones Road (#DIS60050574)**

Condition Number	Consent Conditions Omaha WWTP Discharge to Air – 64 Jones Road (#DIS60050574)	Compliance Rating	Comment
44	<p>Duration</p> <p>This discharge permit DIS60050574 will expire on 20 March 2052 unless it has lapsed, been surrendered or cancelled at an earlier date.</p>		
45	<p>The consent holder is to ensure that all processes on the site are operated, maintained, supervised, monitored and controlled to ensure that emissions to air authorised by this consent are maintained at the minimum practicable level.</p>	1	Ongoing

Condition Number	Consent Conditions Omaha WWTP Discharge to Air – 64 Jones Road (#DIS60050574)	Compliance Rating	Comment
46	No noxious, offensive or objectionable dust and/or odours (in the opinion of an enforcement officer) are to be caused by discharges from the activities authorised by this consent beyond the boundary of the site.	1	Ongoing
47	No hazardous air contamination, caused by discharges from activities authorised by this consent, which causes, or is likely to cause, an adverse effect to human health, the environment or property, is to occur beyond the boundary of the site.	1	Ongoing
48	All sludge removal from the oxidation ponds and subsequent de-watering and disposal must be conducted in a manner that minimises odour to the extent practicable.	1	
49	The consent holder is to prepare and maintain an Odour Management Plan, as part of the Environmental Management Plan, to describe measures to control and reduce the potential for odour generation to occur, which could give rise to off-site effects. The Odour Management Plan must be to a standard acceptable to the Council (Team Leader – Northern Monitoring) and is to be submitted to the Council (Team Leader – Northern Monitoring) for approval in a technical certification capacity within six months from the date of commencement of this consent. Once approved, the Odour Management Plan is to be implemented immediately by the consent holder.	1	Plan approved in August 2017
50	As a minimum, the Odour Management Plan is to include the following: a. Locations of dissolved oxygen meters located in anaerobic ponds adjacent to the edge of the ponds and in other ponds if required; b. Methods and frequency of information collection from the dissolved oxygen meters; c. Alert/response Levels	1	
51	When preparing the Odour Management Plan the consent holder is to ensure that immediately adjacent landowners / occupiers and key stakeholders are consulted. This process is to include submitting a draft of the Odour Management Plan to those parties for comment and allowing no less than 10 working days for any responses. When submitting the Odour Management Plan for certification, the consent holder is to provide to the Council with a summary of consultation undertaken, a copy of any written feedback received, how any feedback received has been incorporated, and where feedback has not been incorporated the reasons why.	1	

## **Appendix A. Supplementary Data**

## Appendix A-1 Omaha Monitoring Results

### Effluent monitoring data

Date	cBOD <sub>5</sub>	E. coli	NH <sub>3</sub> -N	NO <sub>3</sub> -N	TN
	mg O <sub>2</sub> /L	cfu/100 mL	mg/L	mg/L	mg/L
2/07/2024	1.1	1.6	0.40	8.3	8.6
9/07/2024	1.1	1.6	0.40	8.5	18.0
16/07/2024	0.8	1.6	0.40	7.5	9.0
23/07/2024	1.4	1.6	0.40	8.4	8.5
30/07/2024	0.5	1.6	0.40	8.2	8.9
6/08/2024	1.3	1.6	0.40	8.8	9.9
13/08/2024	0.8	1.6	0.40	0.3	11.0
20/08/2024	1.1	1.6	0.40	10.0	11.0
27/08/2024	0.5	1.6	0.40	9.8	11.0
3/09/2024	0.5	1.6	0.40	10.0	12.0
10/09/2024	2.4	1.6	0.40	9.9	12.0
17/09/2024	1.2	1.6	0.40	10.0	12.0
24/09/2024	0.6	1.6	0.40	11.0	11.0
1/10/2024	1.9	1.7	0.40	8.5	8.8
8/10/2024	1.8	1.6	0.02	6.2	7.6
15/10/2024	2.9	1.7	0.03	6.3	7.5
22/10/2024	2.4	1.6	0.02	4.9	22.0
29/10/2024	1.4	1.6	0.04	6.9	7.1
5/11/2024	0.8	1.6	0.75	9.3	9.8
12/11/2024	2.3	1.6	1.30	9.0	12.0
19/11/2024	2.4	1.6	0.55	10.2	11.0
26/11/2024	2.2	1.6	0.55	10.0	11.0
3/12/2024	2.3	1.6	0.27	10.3	12.0
10/12/2024	1.5	1.6	0.08	9.8	11.0
17/12/2024	5.7	1.6	0.04	8.7	10.0
24/12/2024	0.9	1.7	0.04	9.5	10.0
31/12/2024	0.8	3.3	0.04	11.9	12.0
7/01/2025	0.9	1.6	0.04	10.7	11.0
14/01/2025	0.6	1.7	0.03	8.5	11.0
21/01/2025	0.9	1.6	0.03	7.9	9.7
28/01/2025	0.9	1.6	0.05	8.4	9.8
4/02/2025	1.2	1.7	0.07	9.0	11.0
11/02/2025	0.6	1.6	0.06	10.4	14.0
18/02/2025	2.5	1.6	0.15	10.8	12.0
25/02/2025	1.1	1.6	0.06	10.3	12.0
4/03/2025	0.8	1.6	0.052	9.1	10.0
11/03/2025	2.7	1.6	0.071	9.4	12.0
18/03/2025	1.3	1.6	0.071	8.9	20.0
25/03/2025	0.7	1.7	0.059	8.8	11.0
1/04/2025	1.2	1.6	0.073	7.6	8.9
8/04/2025	2.0	1.7	0.049	8.4	10.0
15/04/2025	1.5	1.7	0.039	8.4	10.0
22/04/2025	0.7	1.7	0.034	9.1	12.0

Date	cBOD <sub>5</sub>	E. coli	NH <sub>3</sub> -N	NO <sub>3</sub> -N	TN
	mg O <sub>2</sub> /L	cfu/100 mL	mg/L	mg/L	mg/L
29/04/2025	0.6	1.6	0.030	9.7	11.0
6/05/2025	2.1	1.6	0.033	8.6	8.9
13/05/2025	1.0	1.6	0.030	9.2	9.8
20/05/2025	2.4	1.6	0.038	9.4	11.0
27/05/2025	0.7	1.7	0.036	10.3	12.0
3/06/2025	0.8	1.7	0.094	11.7	13.0
10/06/2025	0.9	1.6	0.530	10.4	11.0
17/06/2025	0.7	1.7	0.680	9.8	11.0
24/06/2025	0.9	1.6	2.000	9.9	11.0

Date	DO	pH	Temp	TP	DPR	TSS
	mg O <sub>2</sub> /L		°C			
5/07/2024	9.35	6.85	12.30			
9/07/2024				0.08	0.01	1.00
12/07/2024	8.91	6.94	13.50			
19/07/2024	8.92	7.38	15.30			
23/07/2024				0.10	0.01	5.60
26/07/2024	9.39	6.77	14.90			
6/08/2024				0.11	0.01	9.00
9/08/2024	9.43	6.79	13.90			
15/08/2024	8.95	6.71	14.80			
20/08/2024	9.00	6.68	14.40	0.09	0.01	3.80
30/08/2024	8.93	6.74	15.80			
3/09/2024				0.09	0.05	1.00
5/09/2024	8.43	6.68	17.10			
13/09/2024	8.44	6.71	17.40			
17/09/2024				0.13	0.08	2.00
19/09/2024	7.90	6.69	19.20			
24/09/2024	8.11	6.70	19.80			
1/10/2024				0.35	0.10	5.60
4/10/2024	8.09	6.91	19.40			
11/10/2024	8.46	6.82	19.20			
15/10/2024				0.67	0.33	4.20
18/10/2024	8.71	6.89	18.60			
24/10/2024	7.81	6.76	20.80			
29/10/2024				1.53	1.43	1.80
1/11/2024	7.73	6.72	20.50			
8/11/2024	7.51	6.78	21.80			
12/11/2024				4.88	4.30	1.40
15/11/2024	8.04	6.75	20.20			
22/11/2024	7.90	7.49	21.00			
26/11/2024				2.38	1.84	1.00
29/11/2024	6.79	6.50	24.90			
10/12/2024				2.02	1.85	7.80
14/12/2024	7.87	6.55	24.40			

Date	DO mg O <sub>2</sub> /L	pH	Temp °C	TP mg/L	DPR mg/L	TSS mg/L
20/12/2024	7.66	6.65	22.00			
24/12/2024				0.54	0.41	2.00
29/12/2024	7.42	6.69	21.90			
7/01/2025				1.08	0.72	5.60
10/01/2025	7.87	6.80	25.00			
17/01/2025	7.68	6.82	25.50			
21/01/2025				0.42	0.24	7.80
24/01/2025	7.74	6.84	25.90			
31/01/2025	8.47	6.84	24.20			
4/02/2025				0.42	0.18	10.00
7/02/2025	8.10	6.72	25.70			
14/02/2025	8.19	6.66	24.30			
18/02/2025				0.69	0.34	9.00
21/02/2025	8.06	6.70	24.80			
28/02/2025	7.73	6.87	24.80			
4/03/2025				0.77	0.44	13.00
7/03/2025	8.21	6.80	23.70			
12/03/2025	8.02	6.97	23.10			
18/03/2025				0.63	0.27	13.00
19/03/2025	8.89	7.01	21.40			
26/03/2025	7.70	7.14	23.40			
1/04/2025				0.64	0.44	5.00
3/04/2025	8.12	7.09	21.40			
11/04/2025	8.02	7.11	20.40			
15/04/2025				0.33	0.11	12.00
16/04/2025	8.08	6.95	20.30			
24/04/2025	8.13	6.93	20.50			
29/04/2025				0.04	0.03	3.40
29/04/2025	9.69	7.19	16.2			
2/05/2025	8.9	7.05	16.2	1.88	1.75	4.40
9/05/2025	9.33	7.02	18.4			
13/05/2025	10.09	7.07	18.4	0.96	0.97	1.80
16/05/2025	9.66	7.1	16			
23/05/2025	9.6	7.6	15.2			
27/05/2025				0.5	0.4	4.2
7/06/2025	9.6	6.9	14.7			
10/06/2025				0.8	0.4	9.2
13/06/2025	8.6	6.7	16.5			
19/06/2025	8.4	6.8	16.2			
24/06/2025				1.4	1.2	2.4
29/06/2025	8.3	8.0	16.2			