



Te Kaunihera-ā-Rohe o Taratahi

CARTERTON
DISTRICT COUNCIL

AGENDA

Water Race Committee meeting

Date: Wednesday, 12 November 2025

Time: 1:30 pm

**Location: Carterton Events Centre
50 Holloway St
Carterton**

Cr B Deller (Chair)

J Booth (Deputy Chair)

Member J McFadzean

Mayor S Cretney

Cr R Round

Cr S Gallon

Member N Wadham

Member G Smith

Notice is hereby given that a Water Race Committee meeting of the Carterton District Council will be held in the Carterton Events Centre, 50 Holloway St, Carterton on:

Wednesday, 12 November 2025 at 1:30 pm

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1 KARAKIA TIMATANGA

Mai i te pae maunga, raro ki te tai

Mai i te awa tonga, raro ki te awa raki

Tēnei te hapori awhi ai e Taratahi.

Whano whano, haramai te toki

Haumi ē, hui ē, tāiki ē!

2 APOLOGIES

3 CONFLICTS OF INTERESTS DECLARATION

4 PUBLIC FORUM

5 DISCUSSION OF THE PUBLIC FORUM

VIDEO CONFERENCE LINK

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Phone conference ID: 556 096 434#

For organizers: [Meeting options](#) | [Reset dial-in PIN](#)



6 REPORTS



6.1 WATER RACE AT COBDEN ROAD

1. PURPOSE

For the Committee to consider recommendations for further investigation and cost estimates to address reported flooding issues from the Water Race at 34 Cobden Road. Any work required would be unplanned expenditure.

2. SIGNIFICANCE

The matters for decision in this report are not considered to be of significance under the Significance and Engagement Policy.

3. BACKGROUND

The property owner at 34 Cobden Road has been reporting that during heavy rain events there is flooding through her property which affects her house, and external detached buildings.

It is reported that this is the result of the water race overflowing after it exits a culvert under Cobden Road which takes a right-hand bend beside the drive. This has been happening on occasion for a number of years. The particular water race passing by the property is a branch of the Carrington water race, part of which passes through Fensham Reserve, with the hill directing a large amount of overland flow to the water race. The Water Race Overseer has commented that on occasion the flow exceeds the channel capacity.

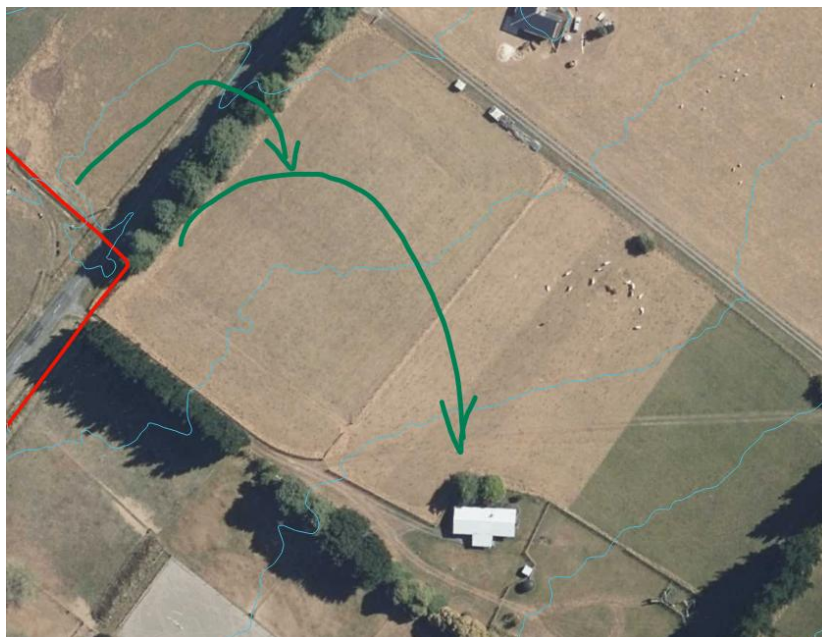


Figure 1 General overland flow toward house at 34 Cobden

4. DISCUSSION

The overall aspect of the land within the property is very flat, with the natural slope of the land directing any rainfall toward the house, so this is the direction of overland flow. Refer to Figure 1 with overland flows indicated by green sketched arrows, note blue contour lines, 1m. There will always be some risk of overland flow unless it is intercepted. This is discussed further in section 0.

However, once the capacity of the water race is exceeded, there are two points where the water race can breach in the area increasing the volume flowing overland.

- The Cobden Road culvert is a constriction, so once it is full, it backs up and the lowest point is the paddock just upstream.
- After the culvert, the water race takes a 90-degree turn slowing the water down and there has been difficulty cleaning the downstream section in the neighbouring property.

The primary purpose of water races is to provide water for stock. However, in order to reduce the construction during the original race excavation, there was frequent use of overland flow paths. This is just such an area, with a large area of land contributing to the flow in the water race.

There are interactions between natural streams and the water race, but these are minimized with piped crossings, but there is a spring fed stream running from Fensham Reserve which discharges into this water race branch, adding further flow to the water race.

Contributor during heavy rain affecting volume (estimated area shown in aerial, Figure 2 below)

Some of the contributors for flow toward Cobden Rd, excluding the water diverted from the Mangatāre Stream are:

- Fensham Reserve runoff
- Spring stream from Fensham Reserve
- Road runoff
- Overland flow
- Drain from Cobden Road north of Fensham



Figure 2 Map of Carrington water race detailing property and catchment area around Fensham Reserve

5. OPTIONS

5.1 Overland flow: Land drainage Act

The house is built in the line of the overland flow path for the property. The water race does intercept some of the overland flows upstream, and it is only in high rainfall events that there are reported flooding. No evaluation on the frequency has been undertaken.

There is always a risk of flooding during heavy rain, which can be controlled under the Land Drainage Act 1908. For protection of the house and buildings, it is recommended a swale is constructed to direct flow around the buildings towards the Mangatārerere Stream. This will also be beneficial for the landowner and would be their responsibility.

The additional water from the water race is likely to increase the size of the swale, which is likely to be considered an unfair burden to the landowner. There are other further options are considered in addition to the swale to manage this.

5.2 Divert portion of flow upstream

The hill runoff, drains and land drains flow to this branch, as highlighted in the maps above are a significant area and the wetlands within the reserve will also increase the volumes.

There is an existing weir and divert upstream of the stream intersect (noted below as intersect1). This can be manually blocked off in the event of heavy rain and is shown as the dotted line top left, in Figure 3.



Figure 3 Map of Carrington Map showing branch, intersect 1, and diversion 1.

There is an option for diverting the flow from the branch upstream of the road. This would be a new divert, noted as Diversion 1. This could be similar to the existing weir/overflow and would divert heavy flows across a short distance to another branch of the water race. The benefit of a constructed weir is that it maintains flow as intended to the water race and doesn't require manual intervention during weather events. This would require approximately 90m of pipeline/ new drain to take the water, as well as the structure in the water race to limit the flow down the branch and divert excess flow down the branch. This would require a discussion with the landowner and be dry most of the time.

A cost estimate and further details can be organised with the Water Race Overseer and the Council contractor.

5.3 Roadside drains

Cobden Road creates a barrier with the run-off from the road and upstream land directed through two culverts under the road, to the drains on the south-eastern side.

The drain is very shallow, not continuous on the south-eastern side, with an undersized culvert (pictured in Figure 5) under a neighbouring drive dividing the two sections. The first culvert (Figure 3) closest to the drive collects water from approximately 100 length of road and relies on soakage, or overflows to number 34 (green arrow Figure 1). The second culvert is deeper and directs north toward another branch of the water race, seen to right side of the aerial image in Figure 4. The macrocarpa trees along the roadside will also soak-up an amount of water.

It is proposed to work with the Roding Department on options to improve the situation with cost estimates. These will include looking at overflow diversion at points: Diversion 2 and Diversion 3.



Figure 4 Map of Carrington branch with 3 diversion options



Figure 5 Photos of roadside drains, eastern side, left- undersized culvert, right-drain beside drive

5.4 Downstream cleaning

The section of the water race immediately downstream is reportedly difficult to clean, with access issues and plantings by the owner. The section is approximately 130m long (Figure 6), so the council is discussing with the roading department about cleaning from the roadside. To assist access, the fence may be removed, but this will need discussion with the landowner. There is a newer fence along the other side of the water race. This would remove an area which has historically been restricted with weed growth and reduce the frequency of over topping. The costs will be discussed with the Roading Department and the Water Race Overseer.



Figure 6 Downstream length of water race to clean

There have been suggestions for increasing the size of the water race culvert and the capacity of the downstream water race, but this is a major exercise with 1.6 km of race (Figure 7) and 13 downstream culverts to upgrade, predominantly in private accessways. This option is not recommended for further investigation or costing.



Figure 7 - Map of Carrington – downstream of Cobden Road

Table 1 - Table of options

Options	Responsibility	Comments
Swale to divert flow around buildings	Landowner	Existing risk, and will manage risk of overland flow from within property. No cost to Council, but contractor and Water Race Overseer could offer advice.
Improve access for downstream cleaning	Water Race Overseer, Roding Department	Fence removal discussion. May be issues with where to place vegetation removed. Traffic management needed.
Roadside drainage Diversion 2 + 3	Roding Department	Discussion with roading department on options to improve drainage.
Divert water at corner – Diversion 1	Water Race Overseer	Over private land. New structure to be installed, increased maintenance. Dry most of the time.

6. NEXT STEPS

1. The landowner will be responsible for organising redirection of overland flow/swale, though Council staff will offer advice.
2. Discussion on the following for options analysis and cost estimates:
 - Discussion with Roding on options to improve road drainage.
 - The staff responsible for the water race will review and determine cost to improve access to the water race section immediately downstream and consult with roading.
 - Once finalised the options above will be reported to the Water Race Committee for recommendation to Council.
 - Recommendation to seek approval from Council for un-planned expenditure, as none of the above options were consulted on in the current LTP.

7. CONSIDERATIONS**7.1 Tāngata whenua**

The options are within existing operations for the water race staff and roading contractors, so will not impact Tāngata Whenua

7.2 Financial impact

The options will need to be considered for the impact on rates as it is unplanned expenditure, once the recommended options are assessed.

7.3 Community Engagement requirements

Current options are not expected to need community engagement.

7.4 Risks

The risks are related to climate change, with the increased frequency of high intensity rainfall events.

7.5 Wellbeings***Social***

A strong and effective council providing trusted leadership

A caring community that is safe, healthy, happy and connected.

Cultural

Te Āo Māori/Māori aspirations and partnerships are valued and supported.

Environmental

Safe and resilient water supply, wastewater, and stormwater systems

Healthy, sustainable waterways.

Economic

Quality, fit-for-purpose infrastructure, and services that are cost-effective and meet future needs. The improved access to water race sections will improve maintenance, potentially reducing costs.

8. RECOMMENDATION

That the Committee:

1. **Receives** the report.
2. **Recommends** further investigation and cost estimates for:
 - (a) Improving access for downstream cleaning of the neighbouring property, including removing the fence.
 - (b) Improving roadside drainage, reviewing options of Diversion 2 and 3.
 - (c) Diverting water at the corner – Diversion 1.

File Number: 466666

Author: Lawrence Stephenson, Group Manager Infrastructure

Attachments: Nil



6.2 WATER RACE REPORT

1. PURPOSE

To provide the Water Race Committee with an update on the management of the Water Races.

2. SIGNIFICANCE

The matters for decision in this report are not considered to be of significance under the Significance and Engagement Policy.

3. WATER RACES OVERSEER ASSISTANT 2IC UPDATE

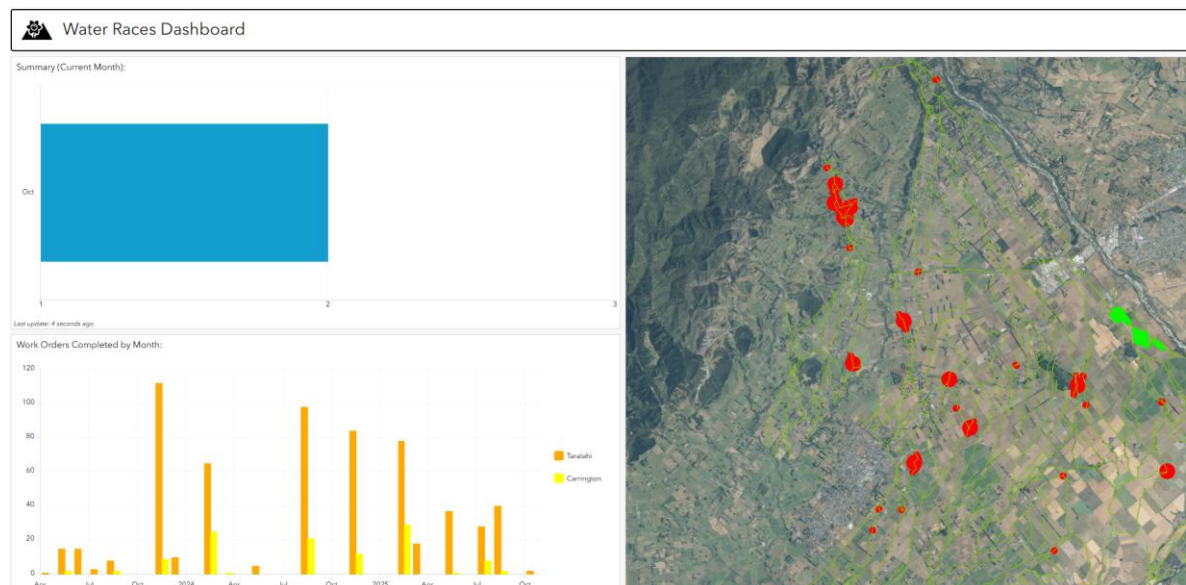
Jason Rose is returning from Australia and expected to start in early December. This will give management a chance to finalise equipment with the Water Race Overseer, prior to Xmas.

4. SUMMARY OF SERVICE REQUESTS, WATER RACE FLOWS AND MAINTENANCE

Service Requests

Referred to Rural Water	1	-	2	2	1	-
Other	5	-	12	11	6	-
Waterrace						
Total for Rural Water	6	0	14	13	7	0

There are a few requests that have been held in the system for a while around the Kokotau branch of the Taratahi water race. These are slowly being progressed, lowering the water level and temporary sandbags to allow the terrain to dry out before some section have pipes installed.



5. OVERSEER'S REPORTSpring update

Early part of the season, extensive rain after a dry winter; this has caused a large number of washouts, overflows resulting in soft banks causing further slumps and blacks. This was then followed up with the high winds bringing trees down and spreading debris.

Bank repair ongoing after the rains and there are a few points where there will be pipes installed to reduce the frequency of the collapses.

A few frosts knocked back the spring growth but there have been frequent blockages of tree roots, weed growth and debris after the rains/winds. The crew are working through to clear these, though there are only 5 current jobs, with the majority related to the Kokotau branch.

Kokotau hill jobs are outstanding; temporary sandbag repairs have been ongoing but waiting for better weather to complete these repairs. The exception is Tiffen Hill section discussed earlier that will need an alternative solution to reduce the channel width.

There is a problem developing with planting. Some are 5-6 years old and growing well, but lack of maintenance for weed control is resulting in blackberry growth into the water race adding to the workload. This will be an ongoing issue.

Working with Brett and Michelle for the water race consent and oral history.

Jason here in December.

6. POTENTIAL WATER RACE HISTORY PROJECT

Michelle has started the project. She is progressing well with reviewing archived documents and has started interviewing people.

7. FINANCIAL REPORT

An extract from the operating budget to the end of October 2025:

	2025/26 YTD Actuals October	2025/26 YTD Budgets October	2025/26 YTD Variance October	2025/26 Full Year Budget	2024/25 Full Year Actuals	2023/24 Full Year Actuals
Maintenance	82,612	90,952	8,340	272,850	355,909	399,265
Staffing	24,391	18,756	(5,635)	56,253	61,396	61,667
Support	23,282	29,088	5,806	87,265	169,341	364,924
Resource Consents	-	-	-	40,000	38,215	32,005
Health Monitoring	2,982	4,376	1,394	13,131	10,559	13,455
Other operating costs	2,197	3,524	1,327	10,560	25,896	18,982
Depreciation	9,254	20,392	11,138	61,170	36,227	50,768
	144,717	167,088	22,371	541,229	697,543	941,066

RURAL WATER	2025/26 YTD Actuals October	2025/26 YTD Budgets October	2025/26 YTD Variance October	2025/26 Full Year Budget	2024/25 Full Year Actuals	2023/24 Full Year Actuals
April 2025						
Income						
Rates Income - General	26,357	26,274	83	52,548	68,518	66,394
Rates Income - Water Races	239,304	236,466	2,838	472,933	530,431	740,876
Fees - Industrial Use	1,356	5,252	(3,896)	15,750	13,090	15,513
Miscellaneous Income	-	-	-	-	-	-
Total Income	267,017	267,992	(975)	541,231	612,039	822,783
Expenditure						
Corporate Services	12,568	15,440	2,872	46,319	85,596	193,418
Operations Overhead	10,392	13,080	2,688	39,242	81,474	169,599
Garage	321	568	247	1,704	2,271	1,908
Consultancy - Other	-	-	-	-	-	-
Fringe Benefit Tax	2,871	-	(2,871)	-	3,759	4,295
General Expenses	-	-	-	-	-	540
Maintenance - General	437	-	(437)	-	27,854	1,745
Maintenance - Intake Gates	540	3,700	3,160	11,100	413	2,075
Maintenance - Water Races	75,744	82,252	6,508	246,750	302,537	388,053
Materials - General	5,891	5,000	(891)	15,000	25,105	7,393
Monitoring - Health	2,982	4,376	1,394	13,131	10,559	13,455
Plant & Machinery- minor purchases	-	-	-	-	-	-
Resource Consent (GWRC annual monitoring)	-	-	-	40,000	38,215	32,005
Telephone & Tolls	125	684	559	2,040	524	3,498
Vehicle Expenses	1,033	1,172	140	3,520	5,455	1,232
Fuel Expenses	1,251	1,668	417	5,000	5,519	5,748
Wages Allocated	21,520	18,088	(3,432)	54,253	57,638	56,877
Staff Training	-	668	668	2,000	-	495
Depreciation	9,254	20,392	11,138	61,170	36,227	50,768
Interest expense	(212)	-	212	-	14,397	7,964
Total Expenditure	144,717	167,088	22,371	541,229	697,543	941,066
Operating Result surplus/(deficit)	122,300	100,904	21,396	2	(85,505)	(118,283)

8. CONSIDERATIONS

8.1 Climate change

There are no direct climate change issues relating to the decisions in this paper.

8.2 Tāngata whenua

There are no issues in this paper that impact on tāngata whenua.

8.3 Financial impact

There are no financial impacts relating to the decisions in this paper.

8.4 Community Engagement Requirements

There are no community engagement requirements relating to the decisions in this paper.

8.5 Risks

There are no risks associated with the decisions in this paper.

8.6 Wellbeing

Economic Wellbeing

- *Quality, fit-for-purpose infrastructure, and services that are cost-effective and meet future needs.*

Cultural Wellbeing

- *Te Āo Māori/Māori aspirations and partnerships are valued and supported.*

Social Wellbeing

- *A strong and effective council providing trusted leadership.*
- *A caring community that is safe, healthy, happy and connected.*

Environmental Wellbeing

- *Safe and resilient water supply, wastewater, and stormwater systems.*
- *Healthy, sustainable waterways.*

9. RECOMMENDATION

That the Committee:

1. **Receives** the report.

File Number: 492776

Author: Lawrence Stephenson, Waters Operations Manager

Attachments: Nil



6.3 WATER RACE WATER QUALITY REPORT

1. PURPOSE

For the Committee to be informed about water quality in the water races and water race consent applications.

2. SIGNIFICANCE

The matters for decision in this report are not considered to be of significance under the Significance and Engagement Policy.

3. WATER RACE RECONSENT APPLICATIONS

The consent application was submitted in May 2023, and the continued operation of the Water Races has been approved by GWRC.

Lawrence Stephenson has been continuing with the consent processes and responded to GWRC in August 2023 outlining the following:

- Further gauging started this summer to support the ecological assessment of the river environments
- The Council experts will review the further information request received.
- A 20-year consent is requested, but we have not yet received feedback from GWRC.
- Similar consent conditions have been suggested to the existing consent, and the results from the further sampling undertaken in the summer will be assessed.

Highlights from subsequent correspondence received from GWRC between October to November 2024 are below, and also recent actions undertaken to address the requirements:

- GWRC confirmed that they reviewed the information submitted by the CDC as per the s92 request, but are seeking more information.
- CDC is currently addressing the s92 request and awaiting information from the consultants.
- An indication of the costs incurred from GWRC has been received. The team is collating these costs, planning the response to the s92 request, and assessing the additional costs that may arise during the consultation period. Officers will update the Committee on the final cost estimates once in due course.
- The officer has engaged with the consultant and coordinated the commencement of water race sampling to support the response to the Section 92 request. Although initial sampling was delayed due to unfavourable river conditions, the consultant proceeded once weather and flow conditions improved. The first stage of work, which included eDNA sampling and site inspections, was completed between October 7 and 9, 2025. Invertebrate sampling will be undertaken in a subsequent stage once hydrological conditions are suitable.

- Additionally, arrangements are being made to undertake supplementary grab sampling over the summer period, further to assess water quality effects at key discharge locations, as recommended by the consultant. Access requirements and sampling logistics are being planned collaboratively with operational staff to ensure the collection of representative data across all target sites.

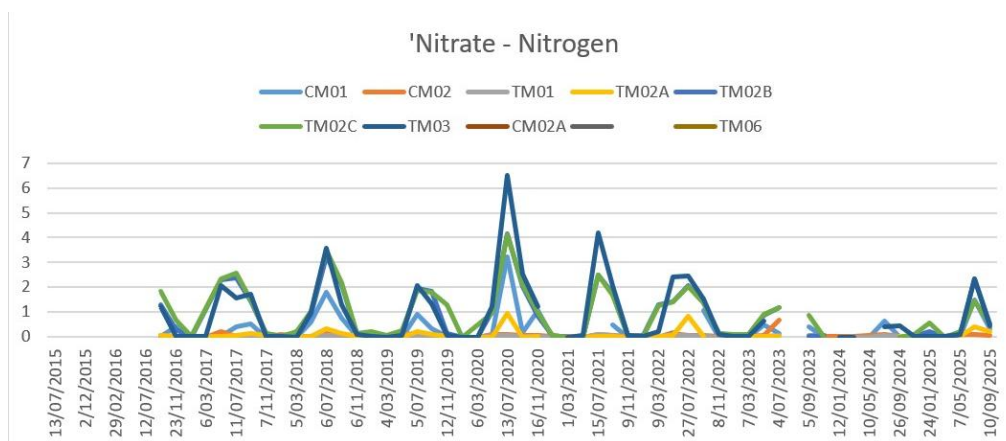
4. UPDATED HISTORIC WATER QUALITY DATA

The charts below cover the sampling period from 2020 – 2025:

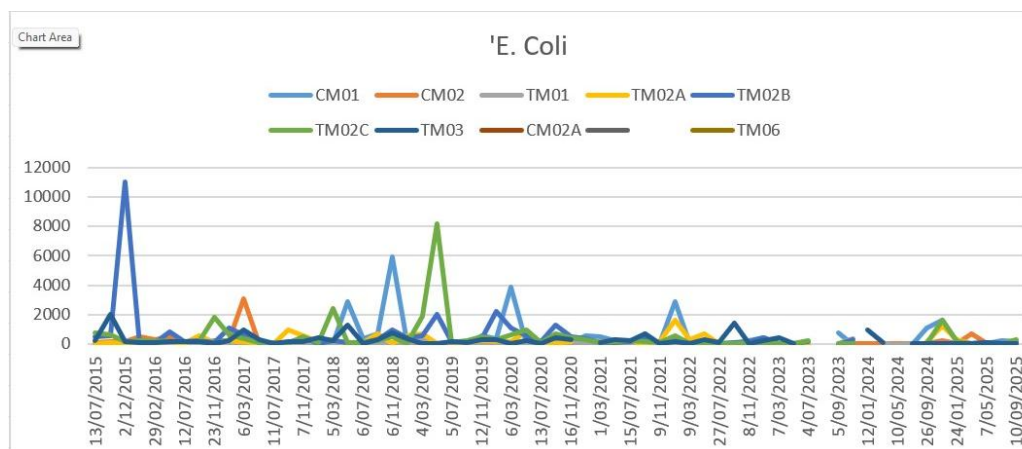
Nitrate levels are generally elevated in winter/spring with the higher flows. The levels are currently less than the Drinking Water standard of 11.3mg/L.

Peaks appear to be in a rising pattern; however, this could be due to seasonal variation (Winter), with general readings well below the maximum acceptable value of 11.3mg/L.

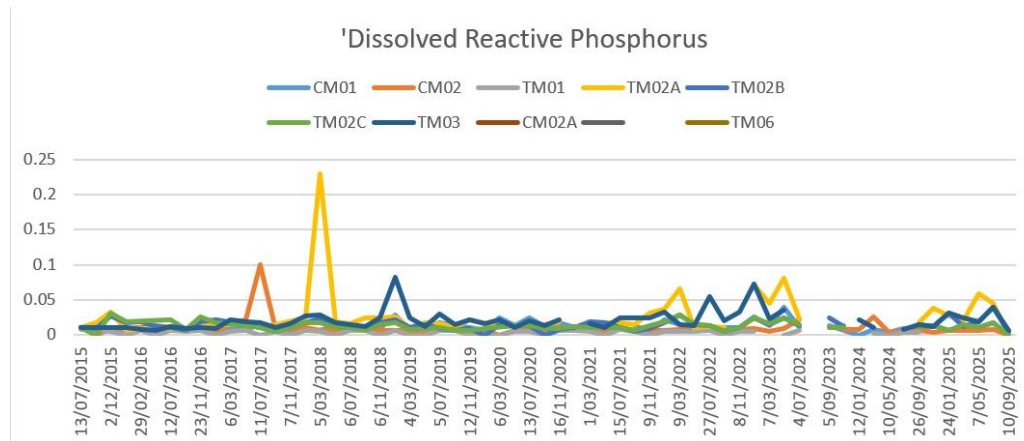
Nitrate levels in water races often rise in winter due to increased rainfall and runoff, which carry fertilisers and waste into the water. Cold, wet conditions also enhance soil leaching, leading to seasonal peaks.



The limit for safe swimming is 260 E. coli coliforms/100 ml. E. coli levels have dropped.



New freshwater targets for Dissolved Reactive Phosphorus are less than a maximum of 0.05mg/L, which all sample points meet in general.



5. RECOMMENDATION

That the Committee:

1. **Receives** the report.

File Number: 492793

Author: Jeet Kiran, Waters Compliance and Monitoring Officer

Attachments: Nil

7 KARAKIA WHAKAMUTUNGA

Kia whakairia te tapu

Kia wātea ai te ara

Kia turuki whakataha ai

Kia turuki whakataha ai

Haumi ē, hui ē, taiki ē