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By email: Anna.Muspratt@gw.govt.nz

WGN970255 [34837] – Paraparaumu WWTP – Discharge to storage basin

Discharge wastewater to land (being an unlined storage area) within the Paraparaumu WWTP site, with minor leakage to ground, for flows that exceed the plant capacity.

WGN970255 [34833] – Paraparaumu WWTP – Discharge to air

Discharge to air from all facilities at the Paraparaumu WWTP (within the Paraparaumu WWTP site).

WGN970255 [2565] – Paraparaumu WWTP – Discharge to Mazengarb Drain

Discharge of tertiary treated wastewater from the Paraparaumu WWTP to the Mazengarb Drain at a rate of up to 18,600 m^3/day, seven days / week, 52 weeks / year (within the Paraparaumu WWTP site).

WGN030149 [22566] – Paraparaumu WWTP – Overflow basin

To discharge screened, dilute wastewater as overflow from the overflow basin at the Paraparaumu WWTP to the Mazengarb Drain.

WGN130218 [32196] – Paraparaumu WWTP – Sludge drying

To discharge to air from the operation and maintenance of a boiler and biofilter associated with the sludge handling process.

WGN040098 [34794] – Paraparaumu WWTP – Sludge lagoons

To discharge contaminants to land from a contaminated site, those discharges being emanations arising from residual sludge in the decommissioned Paraparaumu Wastewater Treatment Plant sludge lagoons.

Quarterly Report to end of September 2024 (Q4, FY2024) for Paraparaumu Wastewater Treatment Plant (PWWTP)

Dear Anna,

This report covers the compliance information required under the conditions of the above resource consents related to the PWWTP for the three months ended September 2024. This report includes the following information:

- An assessment of compliance against the resource consent conditions for Q1 (Appendix A).
- Quarterly monitoring results required by resource consents WGN970255 [34837], [27633] and [2656] (Appendix B).
- Annual monitoring results required by resource consent WGN130218 [32196], noting these results are submitted on a quarterly basis (Appendix B).

Overall compliance with resource consents in Q1 FY2025

The Council is fully compliant with all PWWTP resource consents as demonstrated in Tables 1 to 4 in Appendix A. The remainder of this letter provides some commentary on the compliance report and the data provided in Appendix B. The quarterly monitoring results are provided in our new reporting format for the Paraparaumu WWTP, which includes the following tabs:

- Traffic Light: A snapshot of compliance over Q1, FY2024.
- Flow summary: A summary of influent (raw wastewater into the WWTP) and effluent (treated effluent discharged into the stream) flows over the quarter.
- Treatment Plant Performance: The quarterly monitoring results for all parameters required by the discharge consents.
- Trending: Compliance trending for monitored parameters over the quarter.

Storm storage pond usage

The storm storage pond was used for the first time since lined in August and September 2024. The report in Appendix B provides the details on storm storage pond use during this time. Approximately 2,500m^3 screened wastewater was diverted to the pond on 26 August. Rainfall on this day was recorded as 56.0mm at the Paraparaumu WWTP. A further 362m^3 screened wastewater was diverted to the pond on 27 August. All diverted screened wastewater was subsequently returned to the plant for treatment over 28 and 29 August. On 3 September, the Council again had to divert screened wastewater to the storm overflow pond, totalling approximately 3,600m^3, which was subsequently returned to the plant for treatment. Photo 1 shows the storm storage pond in operation in August. The pond operated as designed with no issues.

Photo 1: Storm storage pond in operation, 26 August.

Community Liaison Group meeting

The Council held its quarterly CLG meeting on 26 August 2024 at the WWTP. Appendix C includes the final meeting minutes and power point presentation. The next CLG meeting will be scheduled for November/December 2024. A copy of this report will be circulated to the CLG prior to this meeting.

Work undertaken in Q1 FY2025 and ongoing projects

The Council is undertaking ongoing work at the PWWTP, including the following:

- Upgrade of RAS-1 is planned for Q2 of FY2025.
- New pH dosing plant commissioned.
- A-Recycling system upgrade: Order placed for large pumps; upgrade work expected to be complete in Q2 of 2024-25.
- Design progressing for hydraulic debottlenecking of clarifier-3 and UV upgrade.
- Concept design for the inlet work is progressing.
- We are preparing an Outline Plan of Works for the construction of Waikanae Duplicate Rising main (Southern Section) within the PWWTP designation.
- Order placed for new scrapper arm for Clarifier-3 as the existing one found in poor condition and due for renewal.

Please contact me should you need further information.

Yours faithfully,

Tess Drewitt Date: 14 October 2024
Consultant Compliance Officer to
Kapiti Coast District Council

Nick Urlich Date: 14 October 2014
Acting Manager Water and Wastewater Services
Kapiti Coast District Council

Cc:
Grant Stuart - Wastewater Treatment Plants Manager

APPENDIX A - ASSESSMENT AGAINST RESOURCE CONSENT CONDITIONS

Table 1: WGN970255 [34837], [27633], [2656] – Paraparaumu WWTP – Discharges

Requirement	Condition	Compliance
All Consents		
General Conditions	1-6, 8, 15, 21	
Discharge of unauthorised contaminants	7	
Community Liaison Group	9	
Air discharge [27633]		
Noxious, dangerous, offensive, or objectionable discharges	11	
Incident notification	12	
Operational logs	13	
Complaints record	14	
Discharges from sludge vitrification process[1]	16	
Discharge to Mazengarb Drain [2656]		
Records of daily flow	12	
Monitoring of effluent quality	13, 19	
Biochemical Oxygen Demand (BOD)	18(a)(i)	
Suspended Solids	18(a)(ii)	
Faecal Coliform Bacteria	18(b)(i)	
pH	18(b)(ii)	
Ammonia, Nitrate, Dissolved Reactive Phosphorous (DRP)	18(c)	
Heavy metals	18(d)	
Dissolved Oxygen	18(e)	
Effects on Ratanui Lakes	16	
Three-monthly reporting to GWRC	17	
Signage	20	
Discharge to unlined storage pond [34837]		
Limit to 3 times per year.[2]	N/A	
Return effluent to PWWTP as soon as reasonably practicable	11	

[1] Note that the sludge vitrification process was decommissioned in 2010.
[2] This is a requirement in the consent details (page 1) as opposed to the conditions of consent.

Table 2: WGN030149 [22566] – Paraparaumu WWTP – Overflow Basin

Requirement	Condition	Compliance
General Conditions	1, 5	
Notify GWRC when consent exercised	2	
Contingency actions	3	
Overflow Contingency Plan	4	

Table 3: WGN130218 [32196] – Paraparaumu WWTP – Sludge Drying

Requirement	Condition	Compliance
General Conditions	1-3, 19, 20	
Wood as fuel	4	
Boiler temperature (above 650C)	5	
Treatment processes	6-8, 10	
Discharge of dangerous, noxious, offensive or objectionable contaminants	9	
Particulates (not exceeding 50mg/m^3)	11	
Emission Testing[3]	12	
Monitoring	13	
Annual Reporting (by 1 August)	13	
Maintenance	14-16	
Complaints register[4]	17	
Incident register & GWRC notification (within 24 hrs / 7 working days)	18	

Table 4: WGN040098 [34794] – Discharge from sludge lagoons

Requirement	Condition	Compliance
General conditions	1, 2, 4	
Groundwater monitoring	3	
Groundwater quality report	5	
Update of Sludge Decommissioning Management Plan	6	Underway

[3] Not currently required by GWRC.
[4] No complaints received during Q4.

APPENDIX B – PWWTP QUARTERLY MONITORING RESULTS

Kāpiti Coast DISTRICT COUNCIL
Me Huri Whakamuri, Ka Titiro Whakamua

Summary Compliance Report for Quarter						Quarter 1
WGN970255[2656]	**Parameter**	**Limit**	**Metric**	**July 2024**	**August 2024**	**September 2024**
Purpose for Which Right is Granted	Discharge Flows	Discharge flows may not exceed 18,600 m3/day into Mazengarb Stream.	No. days discharge flows exceeded limit.	0	0	0
Condition 18 (a) (i)	BOD5	The Geometric Mean for BOD from 12 monthly samples must be under 15g/m3	Geometric mean	3.62	3.95	5.62
		Only one BOD sample/month may exceed 25g/m3	No. days sample exceeded limit.	0	0	0
Condition 18 (a) (ii)	Suspended Solids	The Geometric Mean for Suspended Solids from 12 monthly samples must be under 15g/m3	Geometric mean	1.81	1.77	1.94
		Only one Suspended Solids sample/month may exceed 25g/m3	No. days sample exceeded limit.	0	0	0
Condition 18 (b) (i)	Faecal Coliform Bacteria	The Geometric Mean for Faecal Coliform from 12 monthly samples must be under 200 MPN	Geometric mean	7	4	14
		Only one sample/month may exceed 5000MPN/100ml	No. days sample exceeded limit.	0	0	0
Condition 18 (b) (ii)	pH	Based on 12 samples/month, the pH must stay within 6-9 (shows the geo mean)	Geometric mean	6.9	7.1	7.3
Condition 18 (c)	Ammonia	Based on 36 consecutive samples, no more than 3 of 36 Ammonia samples exceed 3.6 g/m3.	Geometric mean		0.10	
Condition 18 (c)	Nitrates	Based on 36 consecutive samples, no Nitrate sample may exceed 30 g/m3.	Geometric mean		8.14	
Condition 18 (c)	Dissolved Phosphorus	No limit - requirement only to analyse samples.	Confirms samples analysed	Y	Y	Y
Condition 18 (c)	Total Phosphorus	No limit - requirement only to analyse samples.	Confirms samples analysed	Y	Y	Y
Condition 18 (e)	Dissolved Metals	No limit - requirement only to analyse samples.	Confirms samples analysed	Y	Y	Y
Condition 18 (d)	Dissolved Oxygen	Based on 36 consecutive samples, no more than 3 Dissolved Oxygen samples may be below 5 ppm.	Geometric mean		6.92	
WGN970255 [34837]	**Parameter**	**Limit**		**Compliant?**	**Compliant?**	**Compliant?**
Purpose for Which Right is Granted	Stormbasin use	Permitted to use four times/year	No. times used	0	1	1
Condition 7 (b)	Notify GWRC	Required to notify GWRC when used.	No. times notified.	0	Y	Y
WGN030149 [22566]	**Parameter**	**Limit**		**Compliant?**	**Compliant?**	**Compliant?**
Purpose for Which Right is Granted	Discharge screened, diluted wastewater as overflow from the stormbasin	No limit - In general accordance with consent documents.	No. times used	0	0	0
Condition 2	Notify GWRC	Required to notify GWRC when used.	No. times notified	0	0	0
WGN040098	**Parameter**	**Limit**		**Compliant?**	**Compliant?**	**Compliant?**
Purpose for Which Right is Granted	Discharge contaminants to land from decommissioned sludge lagoons	No limit - In general accordance with consent documents.	Confirms compliance.	Y	Y	Y
WGN130218 [32196]	**Parameter**	**Limit**		**Compliant?**	**Compliant?**	**Compliant?**
Purpose for Which Right is Granted	Discharge contaminants to air from Wastewater Treatment Plant Operation and Maintenance	No limit - In general accordance with consent documents.	Confirms compliance.	Y	Y	Y
Condition 5	Boiler Temperature	Must be maintained above 650 degrees (when recorded temperature is increased by 20% taking into account probe location, excludes maintenance & repair)	No. times temperature dropped below 650 degrees	0	0	0
Condition 13	Monitor and record plant parameters	Requirement to continuously monitor and record plant parameters and report to GWRC annually.	Confirms compliance.	Y	Y	Y
Condition 17 & 18	Complaints and incidents.	Requirement to record/report complaints and incidents.	No. complaints/incidents.	0	0	0

Kāpiti Coast DISTRICT COUNCIL
Me Huri Whakamuri, Ka Titiro Whakamua

Paraparaumu WWTP - Quarterly Flow Data Jul-24 / Sep-24

Location	Influent Flow		Effluent Flow		Rainfall
	Average rate	Total	Average rate	Total	Total
Limit				18600	
Units	L/s	m³/day	L/s	m³/day	mm
1/07/2024	124	10748	128	11032	0.7
2/07/2024	111	9615	123	10616	0.0
3/07/2024	108	9293	118	10177	0.0
4/07/2024	103	8890	114	9827	0.0
5/07/2024	104	9026	115	9929	0.0
6/07/2024	107	9287	117	10143	0.0
7/07/2024	105	9043	115	9958	0.0
8/07/2024	103	8880	114	9816	0.0
9/07/2024	101	8710	112	9696	0.0
10/07/2024	98	8503	111	9590	0.0
11/07/2024	98	8468	111	9554	0.0
12/07/2024	100	8669	113	9752	0.0
13/07/2024	103	8893	114	9870	0.0
14/07/2024	103	8890	114	9834	0.1
15/07/2024	99	8567	112	9689	3.1
16/07/2024	97	8390	112	9716	0.3
17/07/2024	98	8453	111	9569	0.3
18/07/2024	99	8531	111	9615	0.0
19/07/2024	101	8749	114	9830	8.4
20/07/2024	111	9591	121	10436	0.0
21/07/2024	111	9580	119	10312	0.4
22/07/2024	104	8967	114	9879	0.0
23/07/2024	100	8625	112	9638	0.0
24/07/2024	101	8691	113	9736	0.0
25/07/2024	101	8747	113	9767	0.0
26/07/2024	100	8636	112	9671	0.0
27/07/2024	102	8834	113	9769	1.5
28/07/2024	103	8913	113	9784	0.1
29/07/2024	103	8889	114	9841	22.1
30/07/2024	140	12121	140	12102	2.7
31/07/2024	114	9836	123	10610	0.3
1/08/2024	109	9412	117	10097	0.0
2/08/2024	110	9520	118	10189	0.2
3/08/2024	113	9768	120	10386	0.0
4/08/2024	111	9587	119	10296	0.0
5/08/2024	104	8985	115	9958	0.0
6/08/2024	101	8765	113	9776	0.1
7/08/2024	103	8891	115	9903	1.3
8/08/2024	99	8555	112	9656	0.0
9/08/2024	101	8763	113	9727	0.0
10/08/2024	107	9217	117	10121	0.0
11/08/2024	107	9215	115	9966	0.2

12/08/2024	100	8638	112	9635	0.0
13/08/2024	101	8767	112	9696	0.0
14/08/2024	99	8558	111	9574	0.0
15/08/2024	97	8388	110	9497	0.2
16/08/2024	98	8483	112	9677	3.4
17/08/2024	106	9174	118	10185	7.9
18/08/2024	128	11051	132	11416	5.1
19/08/2024	129	11130	135	11639	0.0
20/08/2024	114	9842	121	10452	0.0
21/08/2024	111	9600	119	10320	1.1
22/08/2024	102	8846	115	9939	1.1
23/08/2024	106	9170	116	10042	18.7
24/08/2024	158	13639	155	13400	0.0
25/08/2024	120	10359	127	10987	30.5
26/08/2024	212	18339	184	15874	11.3
27/08/2024	203	17526	189	16328	2.4
28/08/2024	171	14750	165	14296	3.2
29/08/2024	159	13739	154	13322	1.0
30/08/2024	152	13163	151	13080	4.6
31/08/2024	188	16259	166	14371	16.4
1/09/2024	222	19205	202	17472	0.0
2/09/2024	181	15619	171	14758	18.2
3/09/2024	206	17834	179	15456	5.3
4/09/2024	201	17353	186	16057	0.0
5/09/2024	163	14108	156	13503	0.0
6/09/2024	159	13727	156	13478	0.6
7/09/2024	157	13543	150	12995	0.0
8/09/2024	175	15092	164	14148	0.3
9/09/2024	154	13273	154	13267	0.0
10/09/2024	131	11348	136	11718	0.5
11/09/2024	126	10867	130	11217	0.0
12/09/2024	119	10294	127	10973	9.6
13/09/2024	144	12484	143	12324	2.1
14/09/2024	149	12869	151	13019	0.0
15/09/2024	145	12522	145	12536	11.7
16/09/2024	176	15184	159	13716	2.6
17/09/2024	165	14293	162	14037	0.0
18/09/2024	146	12655	147	12718	1.5
19/09/2024	137	11846	138	11891	1.0
20/09/2024	136	11770	138	11910	0.0
21/09/2024	140	12064	139	12027	1.6
22/09/2024	133	11515	135	11680	0.0
23/09/2024	135	11704	136	11780	0.0
24/09/2024	124	10676	129	11149	0.0
25/09/2024	124	10741	129	11169	0.0
26/09/2024	115	9957	123	10649	0.4
27/09/2024	116	10039	123	10590	0.0
28/09/2024	123	10602	127	10972	0.0
29/09/2024	117	10130	121	10470	0.0

30/09/2024	117	10071	122	10568	0.0

Parameter	Alkalinity	BOD	COD	Total N	TSS
Units	g/m³	g/m³	g/m³	g/m³	g/m³
Limit 1 (Geometric Mean)		15			15
Limit 2 (must not exceed for >1/12		25			25
Year-To-Date Summary					
Number of Samples	36	36	36	36	36
Geometric Mean					
YTD	74.41	4.31	26	7.06	4.73
Jul-24	68.90	3.62	19.17	7.75	1.81
Aug-24	77.76	3.95	25.02	7.00	1.77
Sep-24	76.90	5.62	35.50	6.49	1.94
Oct-24					
Maximum	89.5	10.4	45	9.2	9.8
No. Samples > limit 1	0	0	0	0	0
No. Samples > limit 2		0			0

Sample Date	Sample Location	Alkalinity	BOD	COD	Total N	TSS
		g/m³	g/m³	g/m³	g/m³	g/m³
1/07/2024	24h Comp	60.5	4.2	12	8.7	6.9
4/07/2024	24h Comp	65.5	3.8	19	8.2	5
6/07/2024	24h Comp	68	3.9	15	8.2	4.4
7/07/2024	24h Comp	76	4.6	29	8.6	6
9/07/2024	24h Comp	78	4.2	19	8.7	3.3
14/07/2024	24h Comp	74.5	4.1	17	7.6	4.4
17/07/2024	24h Comp	63	3.8	22	6.5	4.1
19/07/2024	24h Comp	71	2.4	22	7.5	4.4
22/07/2024	24h Comp	71.5	4.6	21	7.6	7
25/07/2024	24h Comp	76.5	2.8	19	6.8	3.6
26/07/2024	24h Comp	65.5	3	19	7.5	4.4
30/07/2024	24h Comp	60	2.9	21	7.5	3.5
1/08/2024	24h Comp	72	3.4	18	6.3	4.4
3/08/2024	24h Comp	81	3.5	13	7.5	5.1
5/08/2024	24h Comp	76	3.2	20	8.2	4.9
6/08/2024	24h Comp	83	4.3	21	5.9	5.5
10/08/2024	24h Comp	58	5	35	9.1	5.6
14/08/2024	24h Comp	86	10.4	27	8.2	4
15/08/2024	24h Comp	81	3.3	33	9.2	3.6
18/08/2024	24h Comp	76	3.4	24	8.6	3.3
20/08/2024	24h Comp	89.5	4.7	39	6.7	5.2
22/08/2024	24h Comp	84.5	3.6	25	6.3	3.9
27/08/2024	24h Comp	79.5	2.3	29	4.2	2.6
30/08/2024	24h Comp	72	3.9	29	5.8	6.1
2/09/2024	24h Comp	66	3.3	36	6.8	2.8
5/09/2024	24h Comp	71.5	10.2	45	6.3	7
7/09/2024	24h Comp	66.5	5.7	36	6.9	7.3
10/09/2024	24h Comp	77.5	6.7	36	5.8	4.1
12/09/2024	24h Comp	81	4.9	37	5.2	3.2
15/09/2024	24h Comp	81.5	4.9	26	6.3	3.9
17/09/2024	24h Comp	80	5.3	34	5.8	9.8
19/09/2024	24h Comp	82.5	5.8	35	6.4	3.9
22/09/2024	24h Comp	86.5	5.2	38	7.2	7.5
23/09/2024	24h Comp	77	5.9	37	8.2	4.4
24/09/2024	24h Comp	73	6.8	37	6.5	8
27/09/2024	24h Comp	83	5	32	7	5.4

Year-to-Date Trends

Paraparaumu WWTP - Post UV Grab Sampling

Parameter	Faecal Coliforms (Out)	Temperature at Time of Sampling	DO (Following Cascade)	pH	Flow Rate	UV Dose Rate
Units	cfu/100 mL	°C	g/m³	0	L/s	mJ/cm²
Limit 1	200		5	6		
Limit 2	5000			9		
Year-To-Date Summary						
Number of Samples	92	92	92	92	92	92
Geometric Mean	7	17.1	6.92	7.06	169.46	56.19
Jul-24	7	17.1	6.9	6.9	156.1	62.7
Aug-24	4	16.9	7.0	7.1	167.8	74.4
Sep-24	14	17.5	6.9	7.3	186.4	37.5
Oct-24						
Maximum (Min for DO)	71	25	5.67	7.6	262.5	119.7
No. Samples > limit 1	0	0	0	0	0	0
No. Samples > limit 2	0					

Sample Date	Sample Location	Faecal Coliforms (Out)	Temperature at Time of Sampling	DO (Following Cascade)	pH	Flow Rate	UV Dose Rate
		cfu/100 mL	°C	g/m³	0	L/s	mJ/cm²
1/07/2024	Post UV Grab	3	17.4	6.72	6.8	140	58.4
2/07/2024	Post UV Grab	7	17	6.98	6.86	163	61
3/07/2024	Post UV Grab	11	16.4	6.82	6.86	157	59.6
4/07/2024	Post UV Grab	4	16.8	7.21	6.79	159	61.5
5/07/2024	Post UV Grab	13	16.9	6.99	6.74	162	59.4
6/07/2024	Post UV Grab	5	16.9	6.85	6.75	174	95.8
7/07/2024	Post UV Grab	3	16.9	6.7	6.77	159	59.8
8/07/2024	Post UV Grab	4	17.4	7.9	6.69	162	91.5
9/07/2024	Post UV Grab	5	16.9	6.73	7.14	148	62.2
10/07/2024	Post UV Grab	16	16.8	6.73	7.19	158	59.7
11/07/2024	Post UV Grab	9	17	6.99	6.75	154	58.2
12/07/2024	Post UV Grab	11	16.5	6.96	6.98	146	61.2
13/07/2024	Post UV Grab	11	16.4	7.36	6.98	154	60.6
14/07/2024	Post UV Grab	7	16.6	6.74	6.76	115	69
15/07/2024	Post UV Grab	2	17.1	7.66	6.93	162	59
16/07/2024	Post UV Grab	14	17.5	6.65	7.06	148	58
17/07/2024	Post UV Grab	6	17.3	6.58	6.75	152	58.3
18/07/2024	Post UV Grab	12	17.5	6.54	6.8	147	61.1
19/07/2024	Post UV Grab	5	17.6	7.15	6.77	166.4	59
20/07/2024	Post UV Grab	9	17.5	5.86	6.87	173	58.4
21/07/2024	Post UV Grab	8	17.4	5.92	6.8	175	61
22/07/2024	Post UV Grab	11	17.5	7.42	7.23	150	61.1
23/07/2024	Post UV Grab	71	17.2	7.46	7.22	155	61.8
24/07/2024	Post UV Grab	7	17.3	6.85	7.16	160	61.3
25/07/2024	Post UV Grab	7	17.4	6.73	7.18	158	58.6
26/07/2024	Post UV Grab	13	17.4	6.71	6.76	157	61.1
27/07/2024	Post UV Grab	10	17.1	7.49	6.83	158	60.6
28/07/2024	Post UV Grab	3	17.2	6.14	6.79	149	59.6
29/07/2024	Post UV Grab	7	17.1	6.79	6.81	146	57.6
30/07/2024	Post UV Grab	2	17.3	6.55	6.58	176.44	88.1
31/07/2024	Post UV Grab	4	16.4	6.89	6.85	170	59.9
1/08/2024	Post UV Grab	3	16.3	6.89	7.15	159	92.7
2/08/2024	Post UV Grab	5	16.8	7.8	6.88	170	82.1
3/08/2024	Post UV Grab	5	16.5	7.39	7.13	182	76.7
4/08/2024	Post UV Grab	2	16.3	6.76	7.16	155	60.1
5/08/2024	Post UV Grab	4	16.6	7.22	7.24	152	94.9
6/08/2024	Post UV Grab	3	16.7	7.52	7.2	158	89.5
7/08/2024	Post UV Grab	5	17	7.75	7.3	155	90.9
8/08/2024	Post UV Grab	3	16.7	6.72	7.06	146.3	62
9/08/2024	Post UV Grab	5	16.7	6.87	6.79	154.9	92.2
10/08/2024	Post UV Grab	7	17.1	7.92	6.8	190	76
11/08/2024	Post UV Grab	7	17.3	7.67	6.81	188	87.9
12/08/2024	Post UV Grab	7	16.9	6.8	6.79	146	59.5
13/08/2024	Post UV Grab	4	16.3	6.74	7.05	152	92.4
14/08/2024	Post UV Grab	2	16.7	6.73	6.88	122	119.7
15/08/2024	Post UV Grab	8	16.8	7.09	7.21	156	92.2
16/08/2024	Post UV Grab	3	16.9	6.79	7.26	152	94.2
17/08/2024	Post UV Grab	5	17.2	6.56	7.03	155	60
18/08/2024	Post UV Grab	3	17.3	6.49	7.13	146	58.4
19/08/2024	Post UV Grab	9	16.9	6.37	7.23	168	59.3
20/08/2024	Post UV Grab	1	22.2	6.63	7.1	153	97.3
21/08/2024	Post UV Grab	3	16.9	7.41	7.16	163	84.8
22/08/2024	Post UV Grab	1	16.8	6.79	7.23	156	90

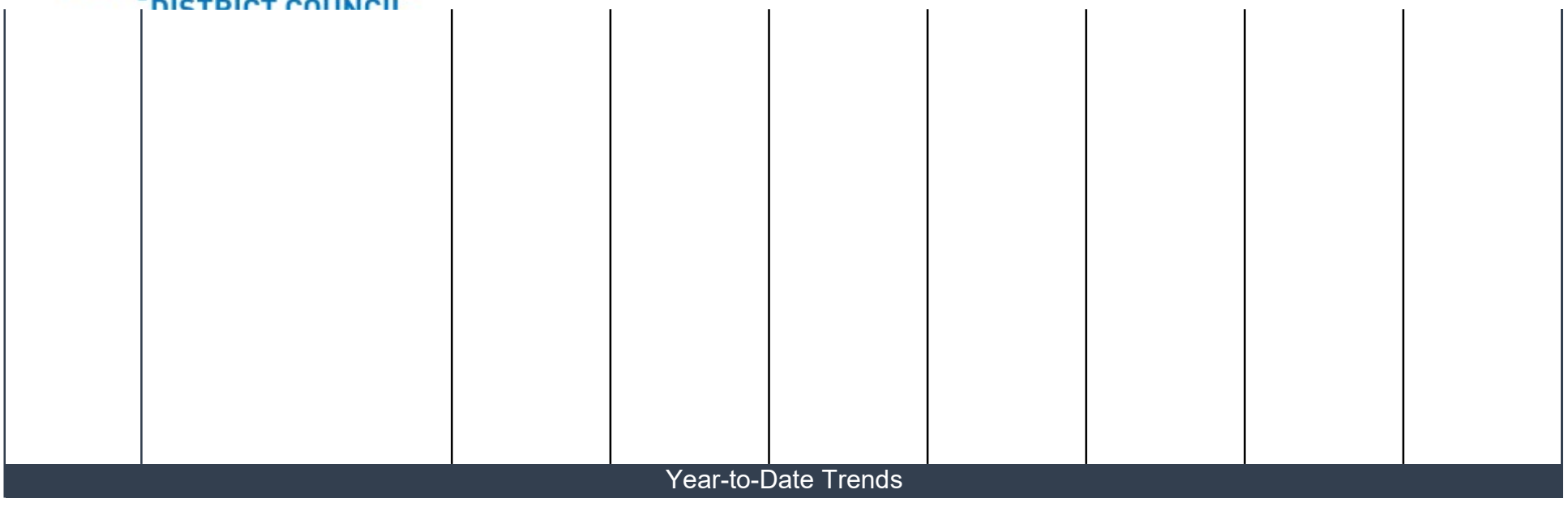
23/08/2024	Post UV Grab	5	16.6	6.77	7.22	155	91.2
24/08/2024	Post UV Grab	2	16.9	8.58	6.84	174	89.4
25/08/2024	Post UV Grab	3	17	7.83	6.67	179	77.8
26/08/2024	Post UV Grab	16	16.7	6.05	7.07	262.5	52.8
27/08/2024	Post UV Grab	8	16	6.55	7.01	227	53.9
28/08/2024	Post UV Grab	3	16.4	6.98	7.11	208	47.2
29/08/2024	Post UV Grab	6	16.1	6.78	7.04	191	52.5
30/08/2024	Post UV Grab	12	16.5	7.35	7.23	183	52.3
31/08/2024	Post UV Grab	5	16.7	6.73	6.89	202	49.5
1/09/2024	Post UV Grab	6	16.5	5.9	7.08	225	49.2
2/09/2024	Post UV Grab	5	16.4	6.57	7.19	199	44.6
3/09/2024	Post UV Grab	5	16.9	6.23	7.31	201	39.7
4/09/2024	Post UV Grab	6	16.2	6.32	7.17	219	36.5
5/09/2024	Post UV Grab	11	16.4	7.03	7.3	194	34.9
6/09/2024	Post UV Grab	10	16.6	6.66	7.22	208	27.2
7/09/2024	Post UV Grab	11	17	6.42	7.24	175	34.6
8/09/2024	Post UV Grab	14	17.3	7.12	7.25	210	28.5
9/09/2024	Post UV Grab	13	16.7	6.95	7.33	190	38.7
10/09/2024	Post UV Grab	12	17	5.8	7.33	174	39.9
11/09/2024	Post UV Grab	4	17	6.61	6.78	178	36.5
12/09/2024	Post UV Grab	13	17	6.94	7.34	173	35.4
13/09/2024	Post UV Grab	14	18.1	7.93	7.19	202	30.1
14/09/2024	Post UV Grab	7	18.9	6.27	7.19	180	41.7
15/09/2024	Post UV Grab	9	19.4	7.18	7.23	193	38.9
16/09/2024	Post UV Grab	11	16.1	7.27	7.14	168	43.5
17/09/2024	Post UV Grab	45	16.3	6.53	7.38	210	36.5
18/09/2024	Post UV Grab	41	16.3	6.75	7.41	199	35.5
19/09/2024	Post UV Grab	20	16.8	7.37	7.43	175	40.7
20/09/2024	Post UV Grab	44	17	6.14	7.37	184	35.7
21/09/2024	Post UV Grab	46	17.4	7.09	7.33	205	30.9
22/09/2024	Post UV Grab	28	17.2	7.6	7.24	181	38.8
23/09/2024	Post UV Grab	47	17.4	7.79	7.35	173	37.8
24/09/2024	Post UV Grab	13	17.6	6.94	7.42	162	42
25/09/2024	Post UV Grab	35	17.8	8.01	7.33	176	37.6
26/09/2024	Post UV Grab	16	19	7.16	7.38	159	42
27/09/2024	Post UV Grab	14	18	6.93	7.27	168	38.4
28/09/2024	Post UV Grab	14	19.8	7.87	7.24	196	33.5
29/09/2024	Post UV Grab	11	18.1	7.5	7.1	159	44.5
30/09/2024	Post UV Grab	23	18.2	5.67	7.6	181	41.3

Year-to-Date Trends

Parameter	Temperature at Time of Sampling	TSS	Total Ammonia-N	Nitrate-N	Nitrite-N	DRP	Total P
Units	°C	g/m³	g/m³	g/m³	g/m³	g/m³	g/m³
Limit 1 (Geometric Mean)			3.6	30			
Limit 2 (must not exceed for >1/12							
Year-To-Date Summary							
Number of Samples	44	45	45	45	45	45	36
Geometric Mean	14.87	5.67	0.04	4.87	0.01	0.03	0.21
Jul-24	14.62	5.42	0.05	5.81	0.01	0.03	0.29
Aug-24	12.27	5.42	0.03	5.35	0.01	0.03	0.28
Sep-24	15.29	6.20	0.03	3.72	0.01	0.03	0.28
Oct-24							
Maximum	17.4	9.2	0.10	8.14	0.038	0.07	0.37
No. Samples > limit 1	0	0	0	0	0	0	0
No. Samples > limit 2							

Sample Date	Sample Location	Temperature at Time of Sampling	TSS	Total Ammonia-N	Nitrate-N	Nitrite-N	DRP	Total P
		°C	g/m³	g/m³	g/m³	g/m³	g/m³	g/m³
2/07/2024	Flow Channel Grab	13.3	6.6	0.057	5.79	0.018	0.025	0.221
3/07/2024	Flow Channel Grab	15	9.2	0.037	5.27	0.0075	0.025	
5/07/2024	Flow Channel Grab	13.5	8.5	0.034	5.79	0.0075	0.025	0.221
7/07/2024	Flow Channel Grab	16.4	8.4	0.095	5.67	0.036	0.025	0.37
8/07/2024	Flow Channel Grab	14.8	4.2	0.042	6.67	0.03	0.025	0.209
10/07/2024	Flow Channel Grab	12.8	4.6	0.035	7.05	0.0075	0.025	0.213
14/07/2024	Flow Channel Grab	12	3.5	0.08	6.26	0.038	0.025	
15/07/2024	Flow Channel Grab	13.6	5.4	0.058	6.19	0.028	0.025	0.214
18/07/2024	Flow Channel Grab	13.7	7.1	0.055	5.76	0.0075	0.056	0.198
20/07/2024	Flow Channel Grab	14.6	5.3	0.064	5.64	0.0075	0.025	0.152
23/07/2024	Flow Channel Grab	17	3.7	0.048	5	0.0075	0.025	0.185
26/07/2024	Flow Channel Grab	16.9	3.4	0.045	5.69	0.0075	0.025	0.163
27/07/2024	Flow Channel Grab	16.8	5.5	0.081	6.39	0.0075	0.051	0.231
30/07/2024	Flow Channel Grab	16.8	5	0.033	6.17	0.0075	0.025	
31/07/2024	Flow Channel Grab	13.5	4.9	0.031	4.39	0.0075	0.025	0.187
2/08/2024	Flow Channel Grab	12.7	4.2	0.025	5.25	0.0075	0.025	0.201
4/08/2024	Flow Channel Grab		7.9	0.061	6.1	0.021	0.025	0.261
5/08/2024	Flow Channel Grab	16.4	4.2	0.037	6.65	0.024	0.025	
6/08/2024	Flow Channel Grab	15.2	5.2	0.033	5.62	0.0075	0.025	0.268
7/08/2024	Flow Channel Grab	15.8	5.5	0.031	5.76	0.0075	0.025	0.214
11/08/2024	Flow Channel Grab	15.6	4.7	0.05	5.79	0.018	0.025	0.248
15/08/2024	Flow Channel Grab	14.6	6.6	0.035	5.03	0.0075	0.025	0.201
16/08/2024	Flow Channel Grab	15.5	5.2	0.032	5.61	0.0075	0.025	0.26
18/08/2024	Flow Channel Grab	17.4	6	0.04	5.55	0.0075	0.025	
19/08/2024	Flow Channel Grab	10.9	5.3	0.029	6.59	0.015	0.025	0.224
21/08/2024	Flow Channel Grab	15.2	5.2	0.034	4.74	0.0075	0.025	0.16
23/08/2024	Flow Channel Grab	13.2	5.7	0.026	5.45	0.0075	0.025	0.198
24/08/2024	Flow Channel Grab	16.8	4.7	0.032	8.14	0.0075	0.025	
28/08/2024	Flow Channel Grab	14	6.4	0.019	2.8	0.0075	0.025	0.146
31/08/2024	Flow Channel Grab	13.6	5.6	0.03	3.45	0.0075	0.025	0.159
2/09/2024	Flow Channel Grab	15.6	7.1	0.023	2.85	0.0075	0.025	
3/09/2024	Flow Channel Grab	15.5	7.7	0.024	3.05	0.0075	0.025	0.214
6/09/2024	Flow Channel Grab	14.2	6.8	0.026	3.07	0.0075	0.025	0.194
8/09/2024	Flow Channel Grab	16.9	7.4	0.03	3.75	0.0075	0.025	0.281
11/09/2024	Flow Channel Grab	16.8	7.4	0.032	3.4	0.0075	0.025	0.161
13/09/2024	Flow Channel Grab	11	7.6	0.031	4.03	0.0075	0.025	0.239
16/09/2024	Flow Channel Grab	12.5	7.7	0.035	3.79	0.0075	0.068	0.212
18/09/2024	Flow Channel Grab	11.5	6	0.022	3.19	0.0075	0.025	0.219
20/09/2024	Flow Channel Grab	14.6	5.7	0.031	3.32	0.0075	0.025	0.209
22/09/2024	Flow Channel Grab	17.4	4.9	0.028	3.51	0.0075	0.025	
23/09/2024	Flow Channel Grab	17.3	4.9	0.028	4.44	0.0075	0.025	0.182
24/09/2024	Flow Channel Grab	17.2	5.4	0.027	3.85	0.0075	0.025	0.233
25/09/2024	Flow Channel Grab	17.4	4.5	0.026	3.94	0.0075	0.025	0.179
28/09/2024	Flow Channel Grab	17.4	4.6	0.038	4.87	0.0075	0.025	0.151
30/09/2024	Flow Channel Grab	16.6	7	0.038	5.8	0.0075	0.025	

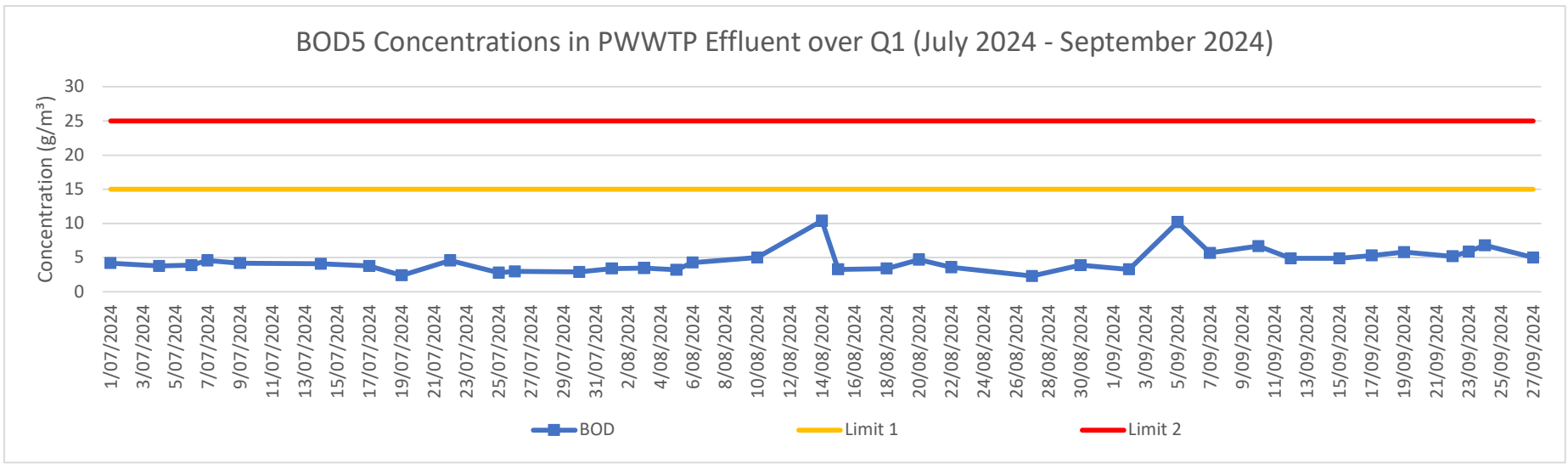
Kāpiti Coast
DISTRICT COUNCIL

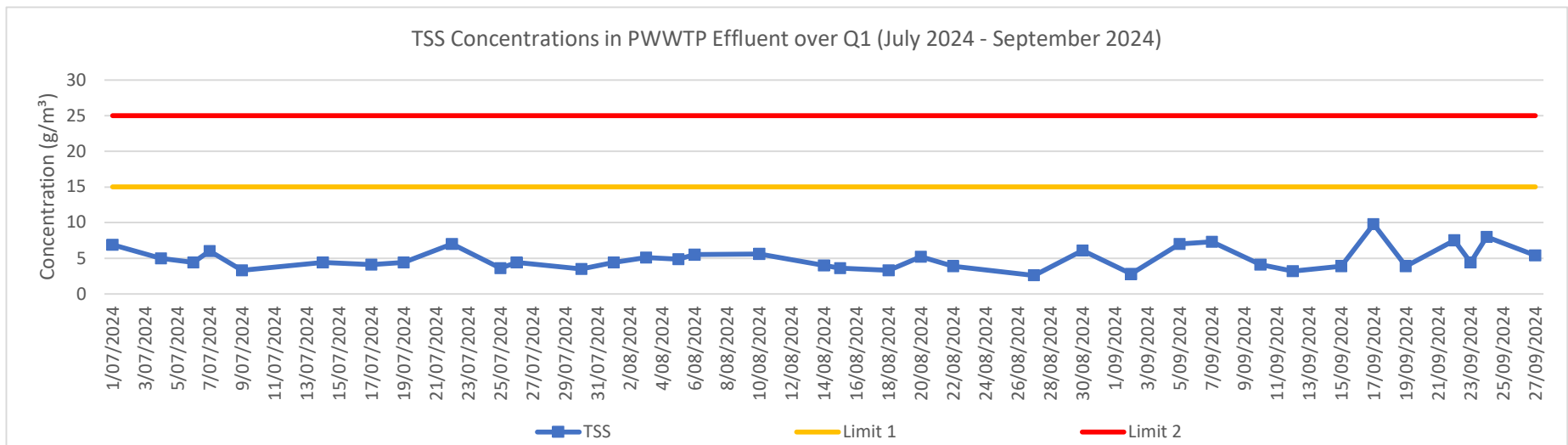


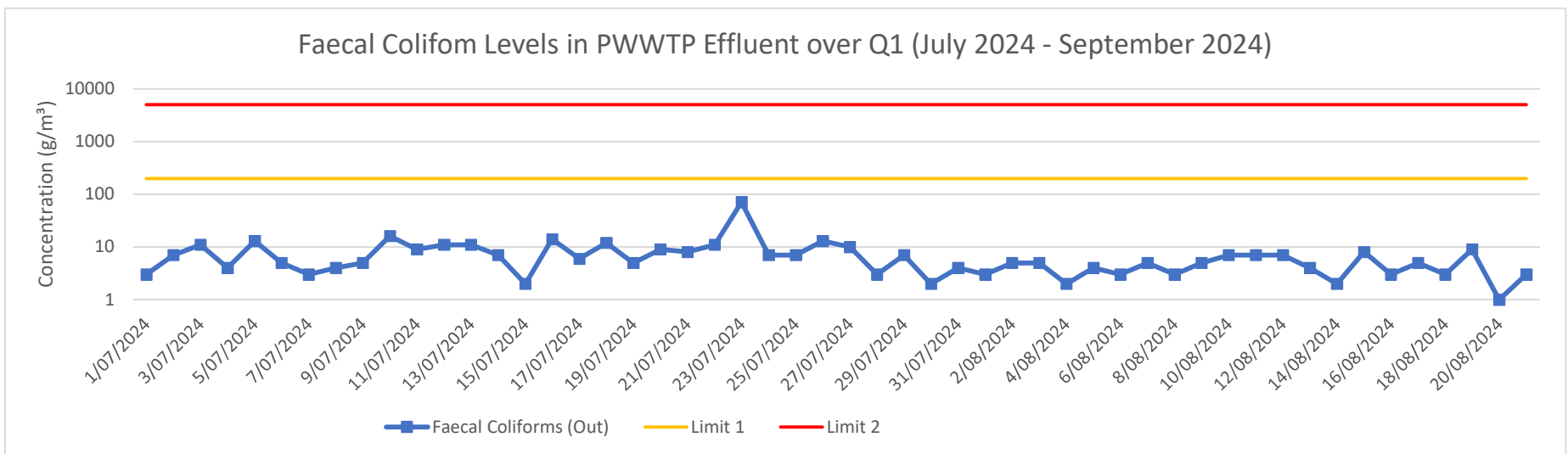
Year-to-Date Trends

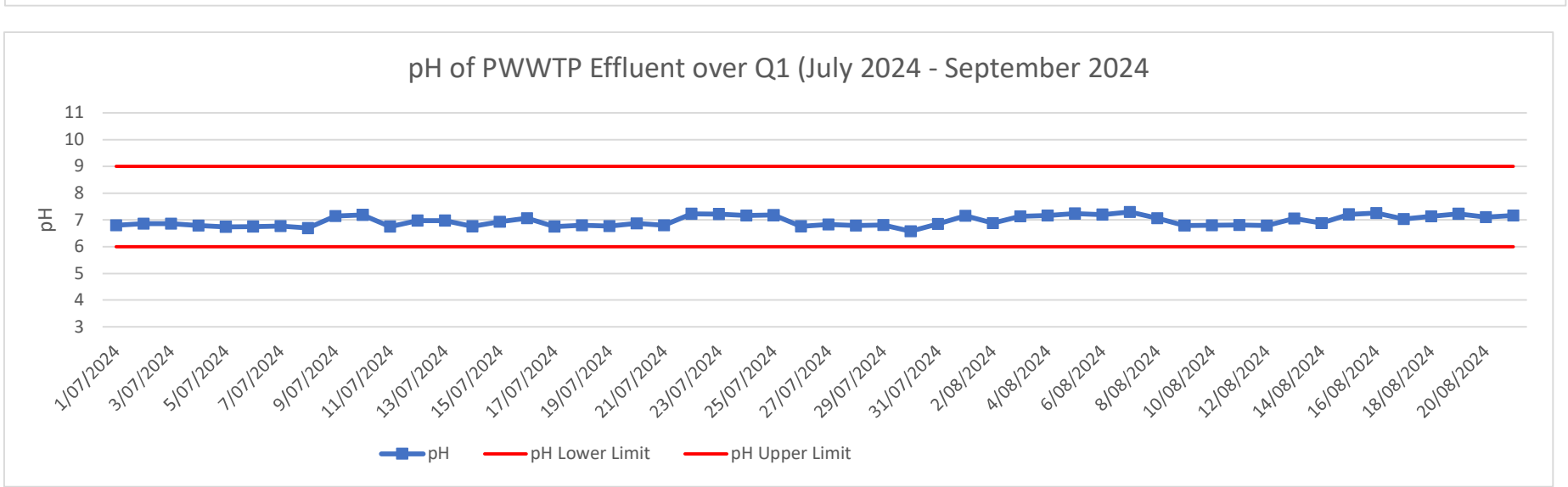
Kāpiti Coast DISTRICT COUNCIL

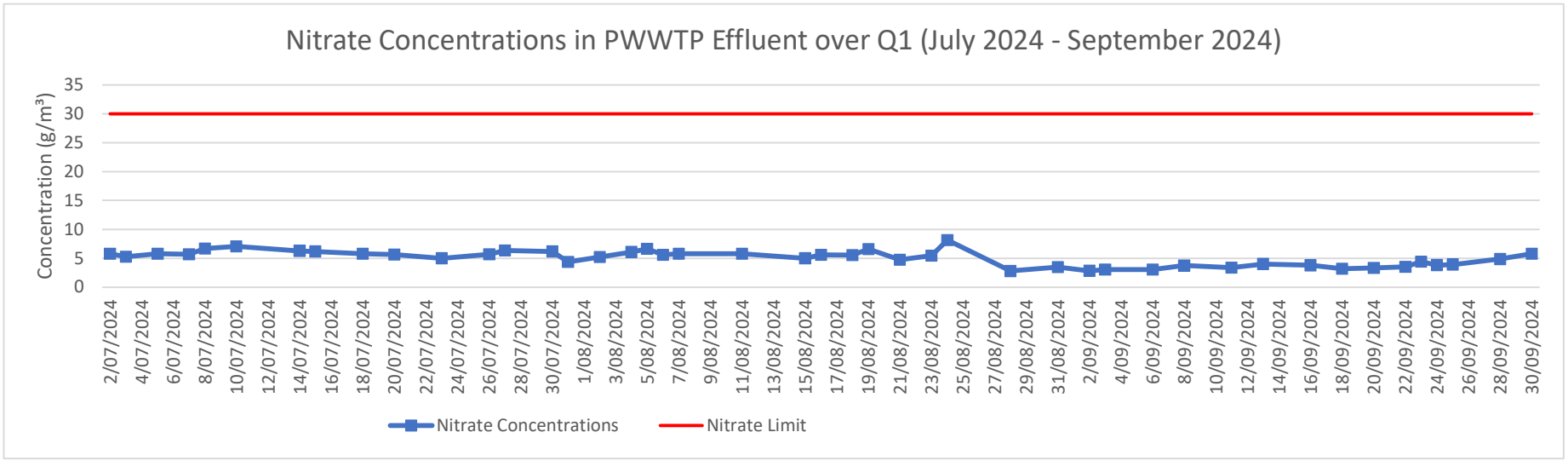
Quarterly compliance trending for the Paraparaumu WWTP effluent (Q1 2024/25)










Nitrate Concentrations in PWWTP Effluent over Q1 (July 2024 - September 2024)
Concentration (g/m³)
35
30
25
20
15
10
5
0
2/07/2024
4/07/2024
6/07/2024
8/07/2024
10/07/2024
12/07/2024
14/07/2024
16/07/2024
18/07/2024
20/07/2024
22/07/2024
24/07/2024
26/07/2024
28/07/2024
30/07/2024
1/08/2024
3/08/2024
5/08/2024
7/08/2024
9/08/2024
11/08/2024
13/08/2024
15/08/2024
17/08/2024
19/08/2024
21/08/2024
23/08/2024
25/08/2024
27/08/2024
29/08/2024
31/08/2024
2/09/2024
4/09/2024
6/09/2024
8/09/2024
10/09/2024
12/09/2024
14/09/2024
16/09/2024
18/09/2024
20/09/2024
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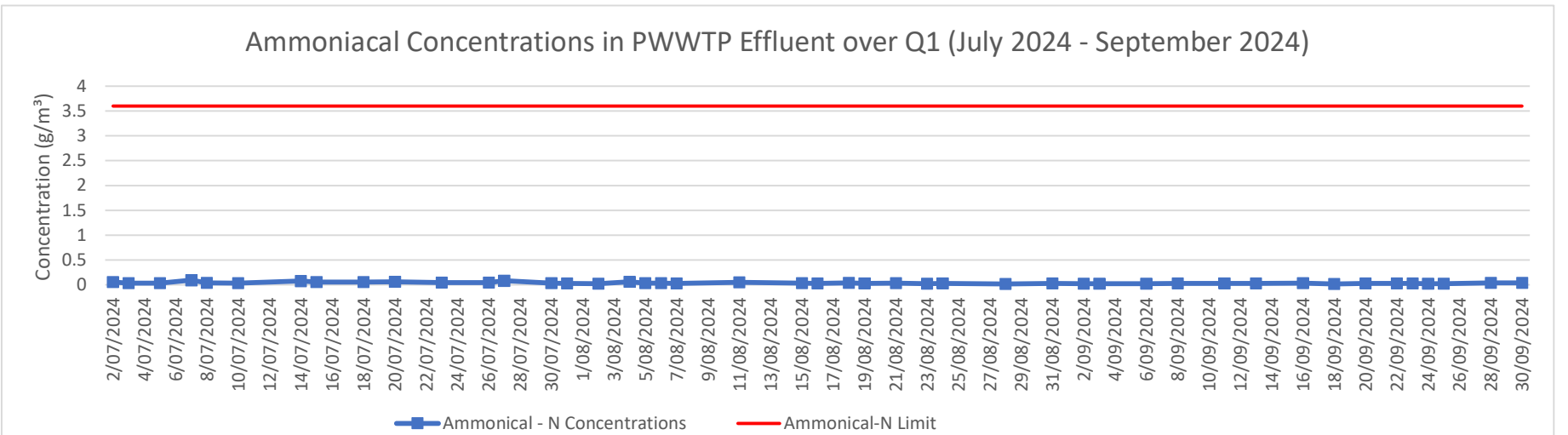
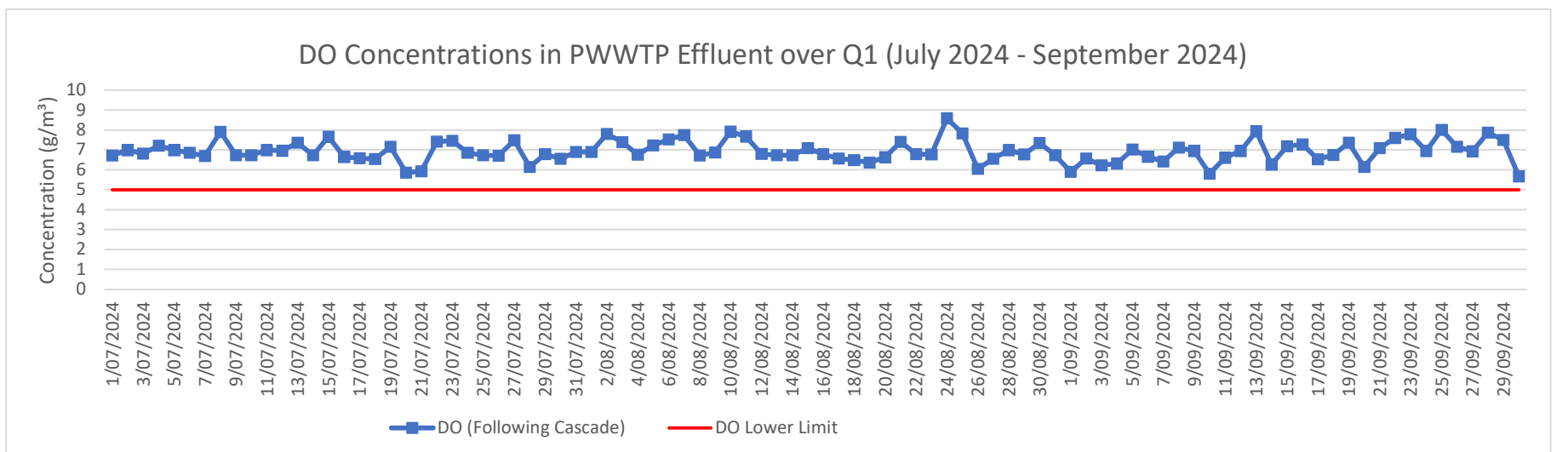
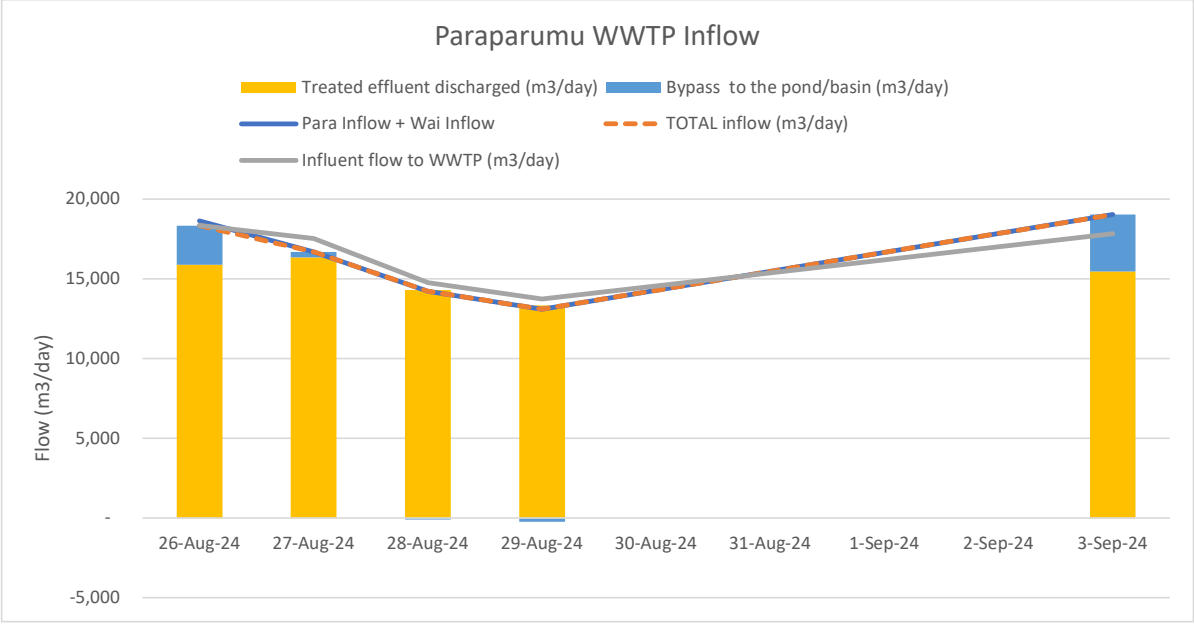
26/09/2024
28/09/2024
30/09/2024
Nitrate Concentrations
Nitrate Limit


Ammoniacal Concentrations in PWWTP Effluent over Q1 (July 2024 - September 2024)
Concentration (g/m³)
4
3.5
3
2.5
2
1.5
1
0.5
0
2/07/2024
4/07/2024
6/07/2024
8/07/2024
10/07/2024
12/07/2024
14/07/2024
16/07/2024
18/07/2024
20/07/2024
22/07/2024
24/07/2024
26/07/2024
28/07/2024
30/07/2024
1/08/2024
3/08/2024
5/08/2024
7/08/2024
9/08/2024
11/08/2024
13/08/2024
15/08/2024
17/08/2024
19/08/2024
21/08/2024
23/08/2024
25/08/2024
27/08/2024
29/08/2024
31/08/2024
2/09/2024
4/09/2024
6/09/2024
8/09/2024
10/09/2024
12/09/2024
14/09/2024
16/09/2024
18/09/2024
20/09/2024
22/09/2024
24/09/2024
26/09/2024
28/09/2024
30/09/2024
Ammonical - N Concentrations
Ammonical-N Limit


DO Concentrations in PWWTP Effluent over Q1 (July 2024 - September 2024)
Concentration (g/m³)
10
9
8
7
6
5
4
3
2
1
0
1/07/2024
3/07/2024
5/07/2024
7/07/2024
9/07/2024
11/07/2024
13/07/2024
15/07/2024
17/07/2024
19/07/2024
21/07/2024
23/07/2024
25/07/2024
27/07/2024
29/07/2024
31/07/2024
2/08/2024
4/08/2024
6/08/2024
8/08/2024
10/08/2024
12/08/2024
14/08/2024
16/08/2024
18/08/2024
20/08/2024
22/08/2024
24/08/2024
26/08/2024
28/08/2024
30/08/2024
1/09/2024
3/09/2024
5/09/2024
7/09/2024
9/09/2024
11/09/2024
13/09/2024
15/09/2024
17/09/2024
19/09/2024
21/09/2024
23/09/2024
25/09/2024
27/09/2024
29/09/2024
DO (Following Cascade)
DO Lower Limit

Storm Storage Pond Useage Q1, FY2025

	Day 1	Day 2	Day 3	Day 4	Day 1
Date	**26-Aug-24**	**27-Aug-24**	**28-Aug-24**	**29-Aug-24**	**3-Sep-24**
Inflow from Paraparaumu catchment (m3/day)	10,521	9,364	7,478	7,151	11378
Inflow from Waikanae (m3/day)	8,098	7,326	6,738	5,940	7650
TOTAL inflow (m3/day)	18,334	16,690	14,216	13,091	19,028
Treated effluent discharged (m3/day)	15,874	16,328	14,296	13,322	15456
Bypass to the pond/basin (m3/day)	2,460	362	- 80	- 231	3,572
Bypass to the pond/basin (% of influent)	6.15%	0.91%	-0.20%	-0.58%	8.93%
Influent flow to WWTP (m3/day)	18,339	17,526	14,750	13,739	17834
Pond Capacity (Actual) (m3)	40000	40000	40000	40000	40000
Pond available capacity at end of day (m3)	37540	37178	37258	37489	36428
Pond available capacity at end of day (% of total capacity)	93.85%	92.95%	93.15%	93.72%	91.07%
Paraparaumu WWTP (mm/day)	56	16.5	3	0	40
Waikanae Beach (mm/day)	0	0	0	0	0
	18,619	16,690	14,216	13,091	19,028



Kāpiti Coast DISTRICT COUNCIL
Me Huri Whakamuri, Ka Titiro Whakamua

Paraparaumu WWTP - Quarterly Air Report **Report Month: September 2024**

Current Quarter: 3
Quarter Start: 1/07/2024
Quarter End: 30/09/2024

	Boiler Combustion Chamber Temperature	Boiler Main Stack Temperature	O2% before Scrubber	Scrubber Pressure In	Scrubber Pressure Out	Dryer Exhaust Fan Speed %	Dryer Exhaust Airflow Rate m3/hr	Biofilter Fan Speed %	Biofilter Fan Airflow Rate m3/hr	Biofilter Fan Loading Rate m3/m2/hr	Biofilter Odour Air Temperature	Biofilter Pressure
Date	0	°C	%	0	0	%	m^3/h	%	m^3/h	$m^3/m^2/h$	°C	0
1/07/2024	690.9	277.6	12.9	-1.0	-245.8	61.2	1194.2	65.0	1354.2	494.3	18.6	7.5
2/07/2024	685.4	279.2	13.0	-1.0	-246.8	61.7	1204.3	65.0	1354.2	494.3	17.4	7.8
3/07/2024	681.1	283.2	12.9	-1.0	-245.4	60.8	1186.4	65.0	1354.2	494.3	15.9	7.6
4/07/2024	684.4	288.9	12.7	-1.0	-247.9	61.6	1202.5	65.0	1354.2	494.3	13.9	7.2
5/07/2024	666.4	256.6	13.3	-1.0	-244.7	57.0	1113.0	65.0	1354.2	494.3	14.8	7.1
6/07/2024	684.9	246.8	13.0	-1.0	-243.5	56.3	1099.2	65.0	1354.2	494.3	15.9	7.0
7/07/2024	689.1	253.3	12.8	-1.0	-245.2	57.4	1121.7	65.0	1354.2	494.3	16.0	7.0
8/07/2024	692.5	259.8	12.7	-1.0	-246.5	58.0	1132.6	65.0	1354.2	494.3	15.8	7.1
9/07/2024	686.8	263.6	12.7	-1.0	-246.6	57.8	1130.1	65.0	1354.2	494.3	15.0	7.1
10/07/2024	686.6	264.7	12.8	-1.0	-248.2	58.2	1136.5	65.0	1354.2	494.3	14.0	7.1
11/07/2024	691.4	268.5	12.6	-1.0	-246.2	58.0	1132.8	65.0	1354.2	494.3	16.4	7.2
12/07/2024	696.9	273.1	12.5	-1.0	-246.5	58.6	1144.8	65.0	1354.2	494.3	16.6	7.1
13/07/2024	692.8	276.2	12.4	-1.0	-247.5	59.3	1158.8	65.0	1354.2	494.3	16.8	7.0
14/07/2024	690.5	278.3	12.3	-1.0	-249.6	60.4	1179.6	65.0	1354.2	494.3	16.5	6.9
15/07/2024	693.0	281.8	12.2	-1.0	-249.8	61.1	1193.6	65.0	1354.2	494.3	16.2	7.0
16/07/2024	693.8	283.6	12.4	-1.0	-246.7	60.6	1183.6	65.0	1354.2	494.3	19.4	7.2
17/07/2024	699.5	286.3	12.7	-1.0	-247.6	61.2	1195.7	65.0	1354.2	494.3	18.2	7.3
18/07/2024	668.9	245.8	13.7	-1.0	-238.6	53.6	1048.3	65.0	1354.2	494.3	16.6	7.3
19/07/2024	673.0	242.2	13.5	-1.0	-242.5	55.2	1078.7	65.0	1354.2	494.3	16.2	7.3
20/07/2024	676.5	248.8	13.2	-1.0	-240.9	55.7	1089.1	65.0	1354.2	494.3	18.7	7.8
21/07/2024	675.7	254.6	13.1	-1.0	-242.8	56.9	1111.3	65.0	1354.2	494.3	17.5	7.7
22/07/2024	669.2	259.1	13.2	-1.0	-244.3	57.8	1128.3	65.0	1354.2	494.3	17.9	7.6
23/07/2024	674.0	263.4	13.2	-1.0	-245.7	58.2	1137.5	65.0	1354.2	494.3	16.7	7.4
24/07/2024	669.1	267.2	13.1	-1.0	-246.7	58.5	1143.6	65.0	1354.2	494.3	14.5	7.3
25/07/2024	664.9	269.2	13.1	-1.0	-247.6	58.9	1151.2	65.0	1354.2	494.3	16.2	7.2
26/07/2024	678.0	275.4	12.8	-1.0	-248.8	59.8	1167.5	65.0	1354.2	494.3	17.9	7.3
27/07/2024	684.1	277.8	12.7	-1.0	-247.4	59.6	1163.8	65.0	1354.2	494.3	19.0	7.3
28/07/2024	691.8	282.9	12.4	-1.0	-247.5	60.0	1171.0	65.0	1354.2	494.3	18.6	7.5
29/07/2024	705.9	288.2	12.2	-1.0	-248.4	60.7	1186.1	65.0	1354.2	494.3	19.6	13.5
30/07/2024	682.1	248.2	12.9	0.4	-244.6	56.4	1101.9	65.0	1354.2	494.3	18.6	36.3
31/07/2024	686.0	244.1	13.0	-1.0	-243.5	56.0	1094.1	65.0	1354.2	494.3	16.5	9.7
1/08/2024	665.7	247.9	13.2	-1.0	-246.3	56.7	1107.8	65.0	1354.2	494.3	15.8	9.2
2/08/2024	659.2	254.6	13.0	-1.0	-246.8	57.4	1122.2	65.0	1354.2	494.3	15.5	9.0
3/08/2024	663.5	258.1	12.7	-1.0	-246.4	57.2	1118.3	65.0	1354.2	494.3	14.3	8.8
4/08/2024	679.2	264.3	12.5	-1.0	-249.3	58.7	1146.0	65.0	1354.2	494.3	14.1	8.5
5/08/2024	687.8	268.5	12.2	-1.0	-249.3	59.1	1154.6	65.0	1354.2	494.3	16.8	8.5
6/08/2024	697.0	272.7	12.2	-1.0	-251.5	59.9	1170.4	65.0	1354.2	494.3	16.5	8.4

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7/08/2024	696.9	277.7	12.0	-1.0	-253.7	60.7	1184.5	65.0	1354.2	494.3	18.2	8.9
8/08/2024	700.9	280.0	11.9	-1.0	-253.2	60.7	1184.9	65.0	1354.2	494.3	18.2	8.9
9/08/2024	691.7	282.5	12.0	-1.0	-255.3	61.4	1199.4	65.0	1354.2	494.3	17.8	8.9
10/08/2024	699.1	283.0	11.9	-1.0	-252.9	60.6	1183.5	65.0	1354.2	494.3	19.0	8.7
11/08/2024	692.8	285.0	11.8	-1.0	-254.6	61.1	1193.7	65.0	1354.2	494.3	19.1	8.6
12/08/2024	695.4	286.8	11.8	-1.0	-255.1	61.8	1205.9	65.0	1354.2	494.3	19.1	8.6
13/08/2024	700.8	287.4	11.9	-1.0	-257.7	61.9	1209.0	65.0	1354.2	494.3	16.8	8.8
14/08/2024	663.5	235.8	13.0	-0.4	-237.6	50.7	990.7	65.0	1354.2	494.3	15.0	8.3
15/08/2024	680.5	234.2	12.2	-1.0	-237.4	52.0	1016.0	65.0	1354.2	494.3	18.6	8.1
16/08/2024	687.8	242.8	11.9	-1.0	-241.8	52.9	1035.1	65.0	1354.2	494.3	20.2	8.6
17/08/2024	661.0	237.5	12.6	-1.0	-240.9	51.7	1011.7	65.0	1354.2	494.3	19.4	9.0
18/08/2024	678.0	247.6	11.8	-1.0	-242.8	53.8	1051.2	65.0	1354.2	494.3	19.4	9.7
19/08/2024	678.7	252.5	11.8	-1.0	-245.0	54.7	1068.3	65.0	1354.2	494.3	16.1	9.6
20/08/2024	673.9	256.7	11.9	-1.0	-247.9	54.7	1068.5	65.0	1354.2	494.3	13.7	8.8
21/08/2024	670.3	259.7	11.9	-1.0	-249.4	54.7	1069.5	65.0	1354.2	494.3	15.0	8.8
22/08/2024	663.8	240.0	12.3	-0.9	-239.7	51.7	1011.4	65.0	1354.2	494.3	17.5	8.9
23/08/2024	684.3	236.3	12.1	-1.0	-235.7	52.6	1027.5	65.0	1354.2	494.3	18.8	8.9
24/08/2024	702.7	245.7	11.6	-1.0	-237.5	53.8	1050.7	65.0	1354.2	494.3	20.0	9.5
25/08/2024	710.8	254.7	11.3	-1.0	-239.1	55.0	1074.1	65.0	1354.2	494.3	20.6	8.8
26/08/2024	715.0	261.0	11.1	-1.0	-240.0	55.6	1087.2	65.0	1354.2	494.3	20.0	8.3
27/08/2024	734.6	263.1	11.3	-1.0	-238.9	55.4	1083.6	65.0	1354.2	494.3	19.9	9.0
28/08/2024	723.7	261.2	11.5	-1.0	-235.4	54.0	1055.7	65.0	1354.2	494.3	20.4	9.4
29/08/2024	715.7	239.7	11.9	-1.0	-235.8	51.6	1009.9	65.0	1354.2	494.3	20.3	9.2
30/08/2024	695.6	234.8	12.1	-1.0	-239.1	52.1	1019.2	65.0	1354.2	494.3	20.0	9.1
31/08/2024	701.4	243.0	11.6	-1.0	-238.0	52.4	1024.3	65.0	1354.2	494.3	21.2	8.7
1/09/2024	707.4	249.1	11.4	-1.0	-238.5	53.1	1037.4	65.0	1354.2	494.3	21.5	9.4
2/09/2024	698.0	250.9	11.6	-1.0	-238.0	52.9	1033.4	65.0	1354.2	494.3	21.1	8.9
3/09/2024	694.2	255.0	11.5	-1.0	-239.0	53.8	1051.2	65.0	1354.2	494.3	20.3	8.9
4/09/2024	689.4	258.5	11.7	-1.0	-242.3	54.5	1065.1	65.0	1354.2	494.3	17.2	9.7
5/09/2024	679.3	260.9	11.8	-1.0	-242.1	54.2	1059.3	65.0	1354.2	494.3	16.5	9.0
6/09/2024	688.9	265.3	11.5	-1.0	-242.1	54.6	1066.4	65.0	1354.2	494.3	19.3	8.7
7/09/2024	704.3	271.0	11.3	-1.0	-243.3	55.8	1090.6	65.0	1354.2	494.3	21.4	8.6
8/09/2024	710.1	275.1	11.2	-1.0	-243.9	56.4	1102.7	65.0	1354.2	494.3	19.7	8.6
9/09/2024	713.1	278.9	11.1	-1.0	-245.4	57.3	1118.8	65.0	1354.2	494.3	20.4	8.4
10/09/2024	714.5	281.8	11.1	-1.0	-246.6	57.8	1129.9	65.0	1354.2	494.3	21.2	8.6
11/09/2024	721.7	284.1	11.2	-1.0	-247.6	57.7	1127.8	65.0	1354.2	494.3	18.4	8.7
12/09/2024	651.9	236.8	13.4	-1.0	-247.6	51.9	1015.6	65.0	1354.2	494.3	18.3	8.3
13/09/2024	685.1	246.0	12.2	-1.0	-255.7	57.6	1125.2	65.0	1354.2	494.3	18.7	9.4
14/09/2024	679.9	251.4	12.2	-1.0	-254.2	57.5	1123.3	65.0	1354.2	494.3	18.6	9.5
15/09/2024	684.5	259.4	12.0	-1.0	-255.2	58.6	1145.0	65.0	1354.2	494.3	18.6	8.6
16/09/2024	697.0	264.7	11.8	-1.0	-255.4	59.5	1162.3	65.0	1354.2	494.3	17.7	9.4
17/09/2024	693.9	268.6	11.8	-1.0	-255.4	60.1	1173.2	65.0	1354.2	494.3	15.2	10.0
18/09/2024	693.6	270.4	11.9	-1.0	-253.3	58.9	1150.3	65.0	1354.2	494.3	16.4	9.3
19/09/2024	687.9	273.6	11.7	-1.0	-252.1	58.9	1150.3	65.0	1354.2	494.3	19.9	9.2
20/09/2024	700.0	279.0	11.7	-1.0	-254.0	59.6	1164.5	65.0	1354.2	494.3	19.9	9.4
21/09/2024	690.6	282.0	11.8	-1.0	-255.7	60.2	1175.5	65.0	1354.2	494.3	19.9	9.3
22/09/2024	691.9	285.8	11.7	-1.0	-255.8	60.5	1181.4	65.0	1354.2	494.3	20.0	9.2
23/09/2024	701.3	291.3	11.5	-1.0	-257.4	61.3	1197.0	65.0	1354.2	494.3	19.9	9.2

24/09/2024	722.3	301.5	10.9	-1.0	-262.7	64.6	1260.4	65.0	1354.2	494.3	21.0	9.1
25/09/2024	699.8	263.1	11.7	-1.0	-262.9	60.9	1188.3	65.0	1354.2	494.3	18.1	9.0
26/09/2024	700.0	259.6	11.8	-1.0	-263.8	61.4	1199.4	65.0	1354.2	494.3	21.2	8.6
27/09/2024	700.6	267.1	11.9	-1.0	-263.8	62.3	1216.1	65.0	1354.2	494.3	20.5	8.8
28/09/2024	692.8	271.2	11.9	-1.0	-263.3	62.1	1212.7	65.0	1354.2	494.3	19.4	8.6
29/09/2024	704.0	278.8	11.6	-1.0	-262.4	62.4	1218.7	65.0	1354.2	494.3	21.2	8.5
30/09/2024	706.4	285.5	11.5	-1.0	-265.5	64.0	1249.1	65.0	1354.2	494.3	20.2	8.4

APPENDIX C – CLG MEETING MINUTES AND PRESENTATION – 26 August 2024

Paraparaumu Wastewater Treatment Plant –

Community Liaison Group (CLG) Meeting

Minutes of Meeting

Held:
Monday 26 August, 10AM-11:30AM, EOC Briefing Room, Fytfield Place, Paraparaumu.

Chair:
Tess Drewitt (Compliance Manager, Council) (**TD**)

Present:
Ramesh Pillai (Manager Water and Wastewater Services, Council) (**RP**)
Grant Stuart (WWTP Manager, Council) (**GS**)
Ben Thompson (Water conservation & trade waste officer, Council) (**BT**)
Reuben Mackey (WWTP Supervisor) (**RM**)
Glen Olsen (Paraparaumu Community Board Chair) (**GO**)
Anna Muspratt (Resource Advisor, GWRC) (**AM**)
Robin Falconer (Friends of the Waikanae River) (**RF**)

Apologies:
Kim Mazur (Laboratory Manager, Council)
Sean Mallon (Group Manager – Infrastructure Services, Council)
Richard Mansell (Waikanae Community Board Chair)
Pip Parkin (Regional Public Health)
Ami Coughlan (Fish and Game)
Phil Teal (Fish and Game)

Distribution: PWWTP CLG

Item		Action
1	**Welcome/ Introductions** ■ TD welcomed everyone to the meeting. Everyone gave a brief introduction of name, role and organisation. ■ TD recorded apologies; additional apologies were received just before and during the meeting, which TD did not pick-up in time to record at the meeting, but these have been recorded in minutes. ■ The adverse weather conditions held several people up from attending the meeting.	-
2	**Agenda Overview** ■ TD presented an overview of the meeting agenda.	-
3	**Matters arising since previous meeting**	
3.1	**Storm storage pond** ■ RM advised the CLG that, because of the rain on the morning of the meeting, he WWTP had just started diverting water to the storm storage overflow pond. This is the first time the pond has been used since it was lined – it was not used at all in 2022/23. GS would send a notification to GWRC. Rainfall was recorded at 40mm.	-

3.2	**Water Outlook – New report format**	-
	▪ The existing report format is outdated and has some errors that were raised by RF at the previous meeting. The previous meeting minutes recorded an action for the Council to provide an update on the new Water Outlook Report forming.	
	▪ BT ran everyone through the proposed report format with an example from Q4. Information was not included within the storm storage over pond columns, the intention is to show how much capacity is in the overflow ponds. The ponds have storage of around 43,000m^3. GS noted that the pond does not currently have a metre, but he can calculate an approximately. The Council is looking to install a basin level measurement which will help determine capacity of the pond.	-
	▪ The CLG discussed potential amendments to the spreadsheet, including adding monitoring limits that trigger a red/orange for non-compliances and potential non-compliances, clarifying whether 1 or 2 UV banks were in use, including year to date graph.	
	▪ **Action:** BT to incorporate discussed changes into final report, which will most likely be circulated for Q1 reporting.	**BT**
	▪ As a side, RP noted that storm water accumulates in the pond, even without the pond being in use. Previously, the stormwater would soak to the ground, however this doesn't happen now that the pond has been lined. The Council therefore needs to discharge this stormwater via the stormwater network, which ultimately discharges into the Mazengarb Drain. After the storm storage pond has been used, the Council will clean the pond with non-potable, UV treated water. Once the pond is clean, any further rainwater will continue to accumulate in the pond and need to be discharged via the stormwater network. RF queried whether this could be done as a permitted activity or included within the new consent.	-
	▪ **Action:** The Council will prepare a memo for GWRC to confirm the position on discharge to the stormwater network.	**TD**
3.3	**Sludge ponds decommissioning**	
	▪ RP gave an update on sludge ponds decommissioning. Several historical sludge ponds at the WWTP are in the process of being decommissioned however they now need to be filled. GWRC has agreed fill from NZTA works currently stored at the landfill can be moved into the sludge ponds. The Council will start these works when the earthwork season commences. The Council needs to source a further 100,000m^3 and is looking at a potential opportunity for fill from Palmerston North. This needs to be tested as appropriate for fill (low Phosphorous and Nitrogen).	
	▪ GO queried whether the material from the storm pond could be used for fill. RP explained that this was largely deemed unsuitable (high peat content) and has therefore been stockpiled on site.	
4	**Review of Quarterly Report – Q3, FY24**	
4.1	**Q4 report summary**	
	▪ TD provided a summary of the quarterly report results that had been pre-circulated: • Fully compliant with consent conditions in Q4. • The Council held CLG meeting in May 2024. • No storm storage pond use since last CLG. • Council is in the process of filling/capping sludge lagoons to be decommissioned.	
4.2	**Annual compliance over 2023/24**	
	▪ TD presented on compliance over 2023/24, as the current consent has no annual reporting requirement, we rely on the quarterly reporting. The effluent flow graph shows since July 2021, the outlet flow peaks have decreased significantly, with no peaks across 2023/24. This reflects much lower rainfall in 2023/24 compared to	

	2022/23, when there were 4 incidents of using the storm storage overflow pond. The CLG suggested the report would show a complete picture with rainfall included. RP notes that the pH monitoring results will show between 7-7.5 once the pH dose corrector is operating. This is part of the overall improvements plan for the WWTP. ▪ **Action:** The Council will circulate a revised outflow graph that includes rainfall. ▪ TD provided a summary of the year in review for 2023/24: • No exceedances of discharge limit. • No exceedances of water quality parameters. • Storm overflow pond lined, but not used in 2023/24. • Three CLG meetings (Sept 2023, Feb 2024, May 2024). • Progressing with consent renewal.	**TD/BT**
4.3	**Consent renewal process** ▪ RP gave an update on the consent renewal process. GWRC indicated they would be publicly notifying the resource consent application because the effects of the discharge on the ecology of the Mazengarb Stream have been assessed as more than minor. The Council challenged this position on the basis that the assessment was based on the 2021 information submitted with the application, however the WWTP has undergone several improvements since then that will reduce the effects (including lining the storm overflow pond, the pH correction, upgrading the UV system, and planting along the Mazengarb Stream near the discharge outlet). GWRC and the Council agreed on an independent SQEP to review the consent application and provide recommendations on notification. The SQEP has reviewed the site but has not provided his final position. The Council expects him to report back in September. We understand that one of the recommendations will include a discharge to land prior to discharging to water, and the Council can implement this.	-
4.4	**UV treatment** ▪ RP also outlined the proposed improvements to the UV system to treat viruses. Treatment and measurement of improvements has several complications. The Council has asked manufacturers to ensure a 5-log reduction of norovirus. Manufacturers have indicated a 5-log reduction is not possible given the low level of viruses already in the treated effluent. No other WWTP's in NZ can meet this standard because of the low level of viruses in treated effluent. The Council should be able to physically achieve a 4-log reduction, but this has significant costs associated with this level of treatment, and the life cycle costs (e.g. the price of electricity). The current system achieves a 2.5 to 3-log reduction. Discussion with manufacturers is ongoing.	-
4.5	**Mazengarb Planting** ▪ BT and RP gave an overview of the proposed Mazengarb Stream planting. The Council is consulting with Te Atiawa over a planting plan for the Mazengarb Stream. This work involves the stormwater team at the Council also as the stormwater discharge at this location also affects the stream. Any planting will need to be done in a way that does not inhibit flood flows through the catchment. The Council will engage Te Atiawa to undertake this work.	
5	**CAPEX Activities – Q4** ▪ RP provided an overview of completed and ongoing works at the PWWTP and a summary of works completed in 2023/24, this is provided in the slides. ▪ RP presented the proposed works to install the Waikanae Duplicate Wastewater Rising Main. The Council is proposing to install a duplicate rising main from Waikanae on Te Moana Road to the WWTP. The WDWRM will increase wastewater capacity for Waikanae and provide resilience to the existing network.	-

	NZTA installed a 2.8km section of the WDWRM as part of the M2PP package of works, however works were halted when iwi expressed concerns above the WDWRM running through and adjacent to culturally significant sites. The Council is re-engaging with iwi over these works, with the intention of obtaining iwi approval to complete the northern and southern sections of the WDWRM. The works in the Northern Section need consent from the Council and the works in the Southern Section are within the Council's designation for WWTP.	-
6	**CLG Feedback on Quarterly Report**	
	▪ No feedback.	
7	**Other CLG feedback**	
	▪ No other feedback raised.	
8	**Other matters**	
8.1	**Norovirus removal**	
	▪ This was discussed earlier in the meeting, as reported under section 4.4 of the minutes.	-
8.2	**Mazengarb Stream riparian planting**	
	▪ This was discussed earlier in the meeting, as reported under section 4.5 of the minutes.	-
8.3	**Biosolids**	
	▪ BT gave a presentation on the work the Council is doing to investigate diverting biosolids from the landfill. The Council currently spends a significant amount of money on disposing good quality biosolids from Paraparaumu and Otaki WWTP to landfill. The equates to approximately 2,500T/year. The biosolids are of a very high quality. The testing system is capital letter for bugs, lower-case letter for metals. The Council's biosolids range from Aa to Ab.	-
	▪ The Council is investigating options to apply biosolids to land. BT, through the GIS team, has developed a map that shows "no go" locations for applying biolsolids to land, based on the 2003 and 2017 biosolids guidelines prepared by Water NZ (updated in 2017): https://www.waternz.org.nz/Article?Action=View&Article_id=26 The mapping system has a red light system showing no go areas, and suitable areas in green. Suitable areas are generally well setback from watercourses and other sensitive areas and cannot be near food production. These areas are therefore usually forestry or native bush. BT highlighted QEP as an area identified as suitable.	-
	▪ While the mapping is promising, BT confirmed the Council has not yet started consultation with iwi over a long-term solution. Te Atiawa CEO said he is happy for the Council to trial uses of biosolids, but the Council has not consulted with iwi on longer term solutions.	-
	▪ RP noted that Silverstream landfill, where biosolids are currently sent, advised that the landfill is reaching capacity, and the Council needs to find alternative solutions for the biosolids. GO queried what form the biosolids are in. GS said the Council produces approximately 5T a day, reduced from approximately 700T. The biosolids are in a pallet form. New Plymouth sells a similar product under the brand name "bio-boost", which is mainly sold to golf courses. https://www.npdc.govt.nz/bioboost/how-it-is-made/	-
	▪ BT noted that sites that need to be rejuvenated are ideal (e.g. contaminated sites). The Council is also limited to 200kg N/ha.	-
	▪ RF queried whether the Council needs approval for this or could just do it now. BT commented that community and iwi assurance is very important, so the Council does not want to apply to land without this. However, the Council is willing to undertake trials. RF suggested that the Friends of the Waikanae River could	-

	undertake trials. They currently plant around 7,000 native seedlings a year so could trial using the biosolids. GS said they could trial to find the right ratio of what to blend with. He recommended the biosolids are blended with woodchip because they are rich in phosphorous. ▪ **Action:** RF and BT to engage over potential trial of biosolids through Friends of the Waikanae River. BT to send additional information to RF to discuss with the group.	**BT/RF**
9	**Next Meeting** ▪ Next meeting will be held in person in November for Q1 reporting. ▪ GO commented that Tuesdays are difficult for Community Board members to attend as Council meetings are on Tuesdays. TD will schedule meetings for Mondays or Wednesdays going forward.	-

Minutes by: Tess Drewitt, Kāpiti Coast District Council

Paraparaumu Wastewater Treatment Plant – Community Liaison Group (CLG) Meeting: Q4, FY24

Monday 26 August 2024, 10AM-11:30AM
EOC Briefing Room, Fytfield Place, Paraparaumu.

Kāpiti Coast DISTRICT COUNCIL
Me Huri Whakamuri, Ka Titiro Whakamua

1

Welcome / Apologies

Kāpiti Coast DISTRICT COUNCIL

2

Today's Agenda

1. Welcome / Apologies
2. Agenda Overview
3. Matters arising since previous meeting
4. Review of Quarterly Report – Q4, FY24
5. Work undertaken in Q4 and ongoing projects
6. CLG feedback on Quarterly Report
7. Any other CLG/Community Feedback
8. Other matters
9. Next meeting

Kāpiti Coast DISTRICT COUNCIL

3

Matters arising since previous meeting

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4

Water Outlook – New report format

- Current format is outdated and has errors – Q4 report sought to correct these (e.g. influent/effluent).
- New report to look similar to Otaki WWTP report.
- We are still doing final tweaks for how this will look.
- What will be helpful for the CLG to see?

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5

Sludge ponds decommissioning

- GWRC has agreed fill from NZTA can be moved into sludge ponds.
- Some area of the sludge ponds can then be decommissioned.
- Search for suitable soil is on for filling the remaining area of the sludge bed and can be updated in the next meeting.

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6

Quarterly Report – Q4, FY2024

7

Resource consents assessed

WGN970255 [34837], [27633], [2656] – Paraparaumu WWTP – Discharges

To discharge treated wastewater from the plant to land (unlined storage area) and the Mazengarb Drain and to discharge contaminants to air from all facilities.

WGN030149 [22566] – Paraparaumu WWTP – Overflow basin

To discharge screened, diluted wastewater as overflow from the overflow basin at the WWTP to the Mazengarb Drain in an emergency.

WGN130218 [32196] – Paraparaumu WWTP – Sludge drying

To discharge to air from the boiler and biofilter associated with sludge handling.

WGN040098 [34794] – Paraparaumu WWTP – Sludge lagoons

To discharge contaminants to land from the decommissioned sludge lagoons.

8

Compliance Summary

- Discharge parameters:

Table 5: Kapiti Coast District Council – Paraparaumu Wastewater Treatment Plant Consent Flows – Summary

Month	Monthly Rainfall (mm)	Discharge parameters		
			Influent (into WWTP)	Treated effluent (at discharge outlet)
April 2024	65.5	Average	9,286	8,976
		Max	10,917	10,682
May 2024	36.0	Average	9,932	8,859
		Max	10,750	9,922
June 2024	65.0	Average	9,886	8,721
		Max	11,021	10,084

- Consent limit: 18,600m3/day

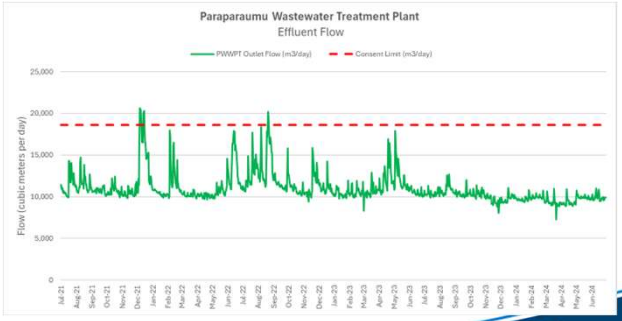
9

Compliance Summary

- Fully compliant with consent conditions in Q4.
- The Council held CLG meeting in May 2024.
- No storm storage pond use since last CLG.
- Council in the process of filling/capping sludge lagoons to be decommissioned.

10

2023-24 Compliance Review



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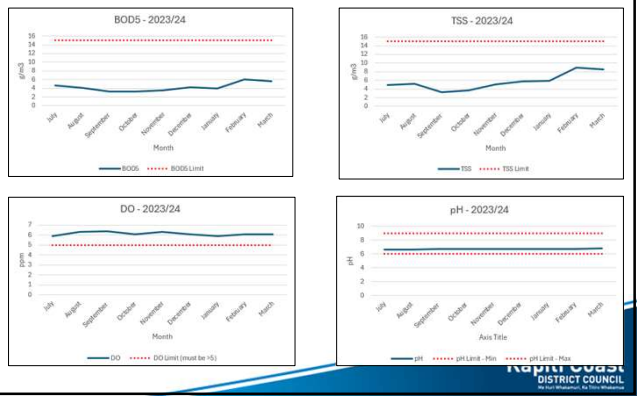
2023-24 Compliance Review



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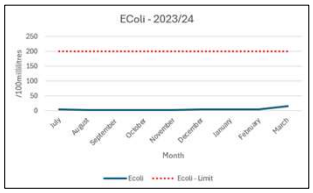
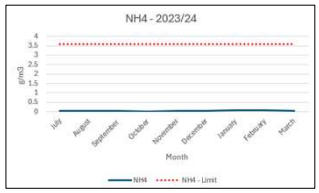
2023-24 Compliance Review





13

2023-24 Compliance Review

- No exceedances of discharge limit.
- No exceedances of water quality parameters.
- Storm overflow pond lined, but not used in 2023-24.
- Three CLG meetings (Sept 2023, Feb 2024, May 2024).
- Progressing with consent renewal.

14

Capex Activities – Q4

15

Works undertaken in Q4

- Upgrade of RAS-1 is planned for Q2 of 2024-25.
- The storage pond upgrade work is complete; the pond is now lined and fully operational.
- New pH dosing plant commissioned.
- A-Recycling system upgrade: Order placed for large pumps; upgrade work expected to be complete in Q2 of 2024-25.
- Design progressing for hydraulic debottlenecking of clarifier-3 and UV upgrade.
- Concept design for the inlet work is progressing.
- Waikanae Duplicate Wastewater Rising Main consenting underway.
- Order placed for new scrapper arm for Clarifier-3 as the existing one found in poor condition and due for renewal.

16

Summary of works completed in 2023/24

- Storm overflow pond lined.
- Discharge outlet upgraded and moved.
- RAS Pump Station 2 upgraded.
- Clarifier 1 refurbished.
- DAF Plant cleaned.
- Sludge beds partially filled with suitable soil from pond work. Further filling is planned as GWRC approved moving topsoil stockpiled (lab tested) at landfill from expressway work.

17

CLG Feedback on Quarterly Report

18

Other CLG Feedback

19

Other matters

20

Other matters

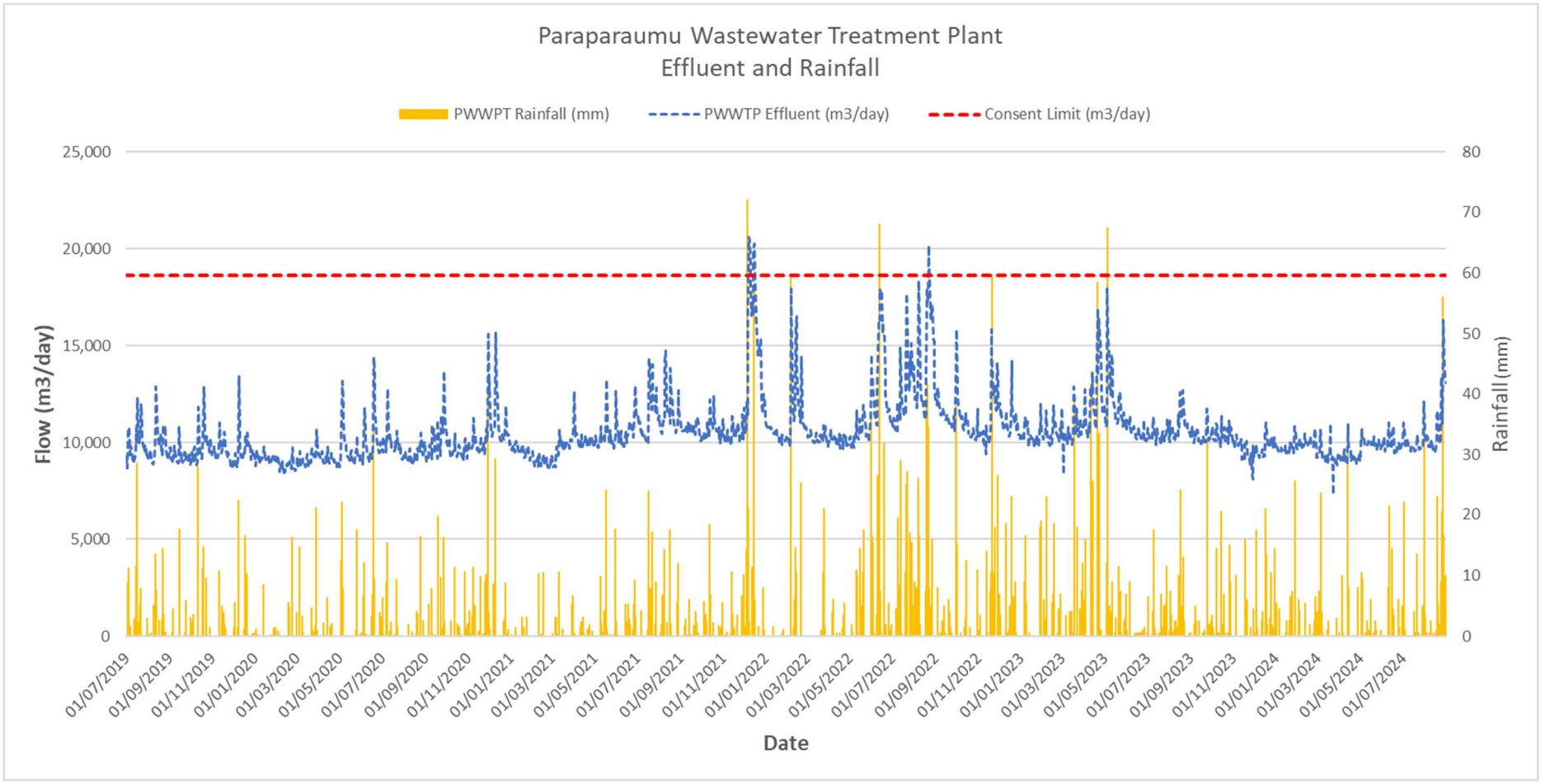
- The Council has been investigating options for treatment to reduce norovirus.
- Proposed Mazengarb Stream riparian planting – Geo-Mapping of suitable location and species of plants completed.
- Liaising with Iwi for the planting work.
- Investigating feasibility of applying biosolids to land

21

Next Meeting

- November 2024 – Q1 reporting, FY25.
- Topics to discuss at next meeting?

22


Paraparaumu Wastewater Treatment Plant
Effluent and Rainfall
PWWPT Rainfall (mm)
PWWTP Effluent (m3/day)
Consent Limit (m3/day)
Flow (m3/day)
Rainfall (mm)
25,000
20,000
15,000
10,000
5,000
0
80
70
60
50
40
30
20
10
0
01/07/2019
01/09/2019
01/11/2019
01/01/2020
01/03/2020
01/05/2020
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