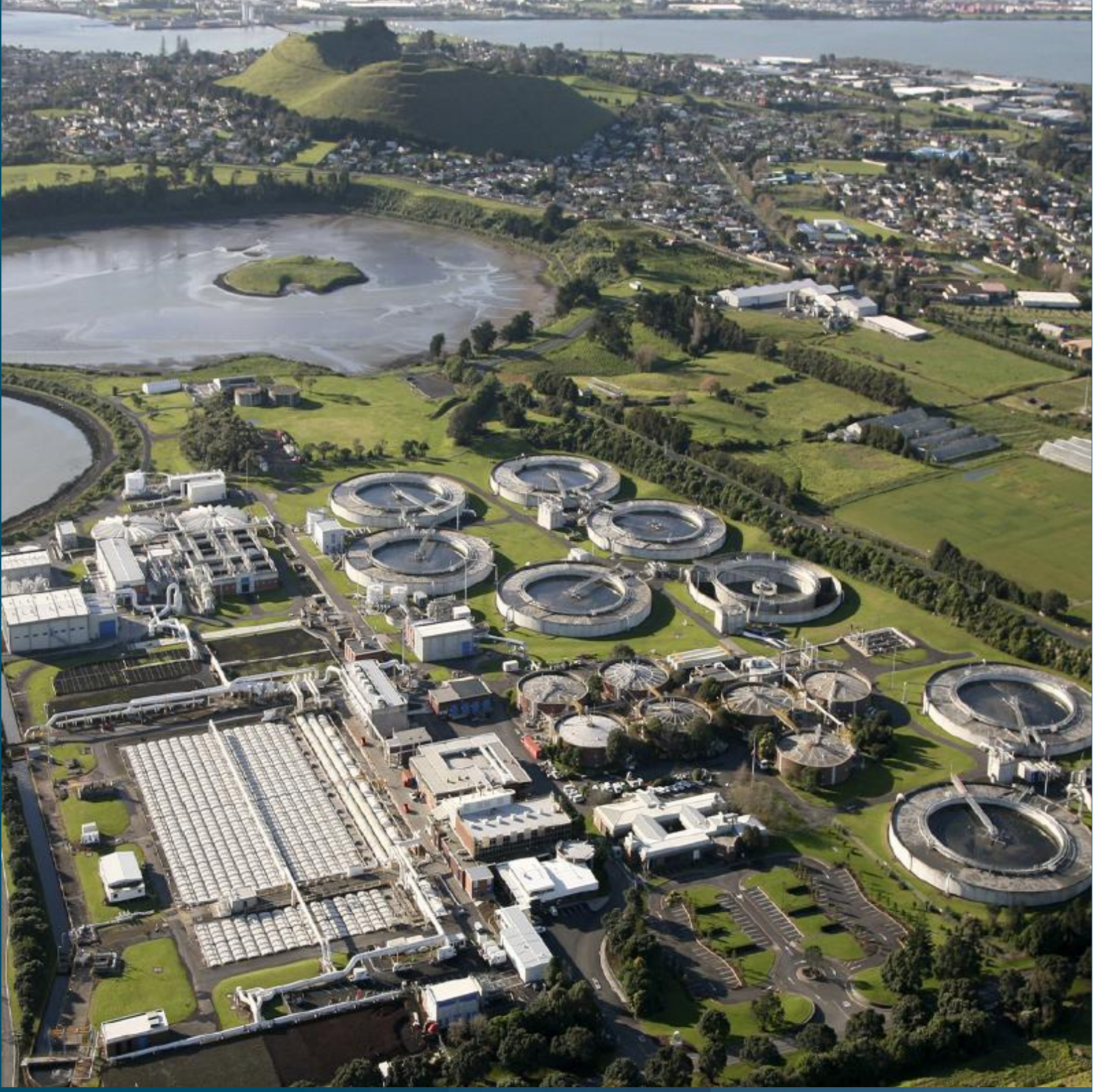


Quarterly Summary

Māngere Wastewater Treatment Plant

Reporting period: June – August 2025

Issue Date: 29 September 2025

Watercare

Executive Summary

Final effluent monthly mean Dissolved Oxygen (DO) for June (79%) was below the minimum stated in Table 2 of Consent 30083 (80%). A number of adverse weather-induced secondary bypass events contributed to the low DO; however, faulty DO and conductivity probes were identified by the instruments team which were resulting in a lower than expected calculated DO saturation even on days unaffected by weather. The conductivity probe was replaced in July, whilst the DO probe required cleaning and calibration. DO has remained within normal range (excluding weather events) since.

Condition 25(2) of Consent 30083 requires the applied UV dose rate to exceed the Table 6 minimum (35 mWs/cm^2) for at least 99% of monthly measurements (measurements to be taken at 15 minute intervals). In August 2025, the site achieved an applied UV dose rate above 35 mWs/cm^2 for 98.95% of measurements; therefore, fractionally below the requirement of Condition 25(2).

Three separate incidents occurred across August 2025 which impacted the overall monthly applied UV dose rate, they were:

1. 8 August – Applied UV dose rate of < 35 mWs/cm^2 across multiple channels for various lengths of time during a non-bypass rain event. Mechanical issues at the Gravity Belt Thickener resulted in elevated solids content in the effluent. The increased solids content and flow rate resulted in reduced applied UV dose rate. Effluent samples from the UV outlet following this event were below the trigger level of 80 cfu/100ml.
2. 19 August – Applied UV dose rate of < 35 mWs/cm^2 across multiple channels for various lengths of time during a non-bypass event. Reasoning was the same as 8 August. In addition, UV Channel 5 did not become operational when it was required, meaning there were less UV channels operating than there should have been. One effluent sample from the UV outlet following this event exceeded the trigger level of 80 cfu/100ml; subsequent samples were below the trigger level.
3. 31 August – Power interuption to the site (network issue) for approximately half an hour resulted in low/no UV dose rate across all UV plant channels for the duration of the event. Subsequently two consecutive samples collected from the UV plant outlet exceeded the enterococci trigger level of 80 cfu/100ml.

Shellfish monitoring was undertaken on all three occassions in accordance with Special Condition 25(6) of Consent 30083. Results have been received and were all less than detection limit for both enterovirus or adenovirus across all three sample runs.

No complaints or comments in relation to plant operations were received by Watercare across this quarterly reporting period.

Normal winter midge control continued throughout the reporting period. Weekly monitoring continued to observe low numbers of midges.

Weekly onsite, and monthly community odour monitoring did not detect any significant odours.

Table of Contents

1 COMPLIANCE REPORT

M-15 final effluent quality results

Table 1-1: Final Effluent discharge quality in relation to requirements of Consent 30083.

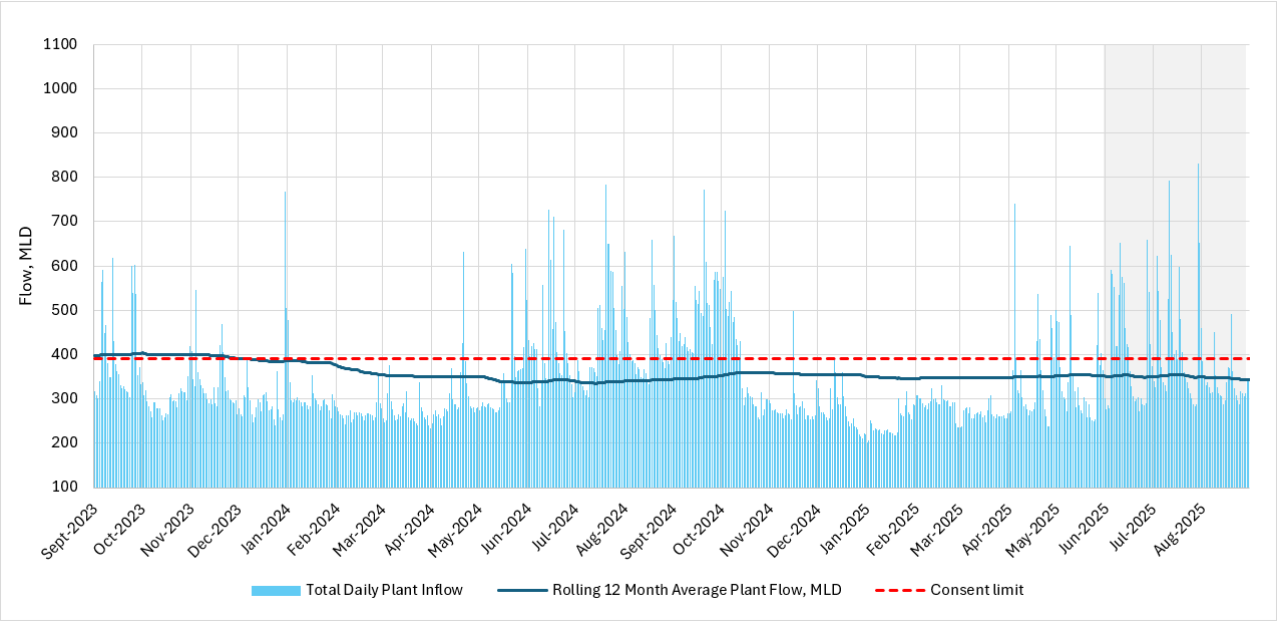
PARAMETER	JUN-25	JUL-25	AUG-25		COMPLIANCE
					MONTHLY MEAN
BOD (g/m³)	3.5	3.3	2.2	<	15
NFR (g/m³)	3.9	4.6	6.1	<	15
Total Petroleum Hydrocarbon (g/m³)	0.3	0.3	0.3	<	0.5
Ammoniacal Nitrogen (g/m³)	1.0	0.9	0.8	<	5[(a)]
Total Nitrogen (g/m³)	8.8	7.8	6.8	<	35[(b)]
Reactive Phosphorus (g/m³)	1.5	1.5	1.2	<	9
Dissolved Oxygen, %saturation	79%	86%	90%	>	80%
					MONTHLY MAXIMUM
BOD (g/m³)	19.0	18.0	3.9	<	50
pH	7.3	7.3	7.6	<	9
Ammoniacal Nitrogen (g/m³)	3.3	4.9	1.9	<	15[(a)]
					MONTHLY MINIMUM
pH	6.9	6.8	7.0	>	6.5
					95%TILE OVER THREE DISCRETE MONTHS
BOD (g/m³)	8.4			<	30
NFR (g/m³)	11.0			<	30
					MONTHLY % UV MEASUREMENT
UV Dose Applied % Measurement	99.95%	99.50%	98.95%	>	99.00

Notes: Mean Dissolved Oxygen (DO) in June was influenced by the number of secondary bypass events. In addition, conductivity and DO probes were reading faulty and required maintenance and replacement parts. The faulty probes resulted in lower calculated DO saturation, even on days unaffected by bypass events. The low applied UV dose for August is explained in Section 2 below.

(a) Ammoniacal Nitrogen limits for the period of April-November inclusive. For December-March inclusive, the limits are 3 g/m³ for monthly mean and 6 g/m³ for monthly maximum.

(b) Total Nitrogen limit for the period of April-November inclusive. For December-March inclusive, the limit is 9.5 g/m³.

Rolling 12 months average daily plant inflow

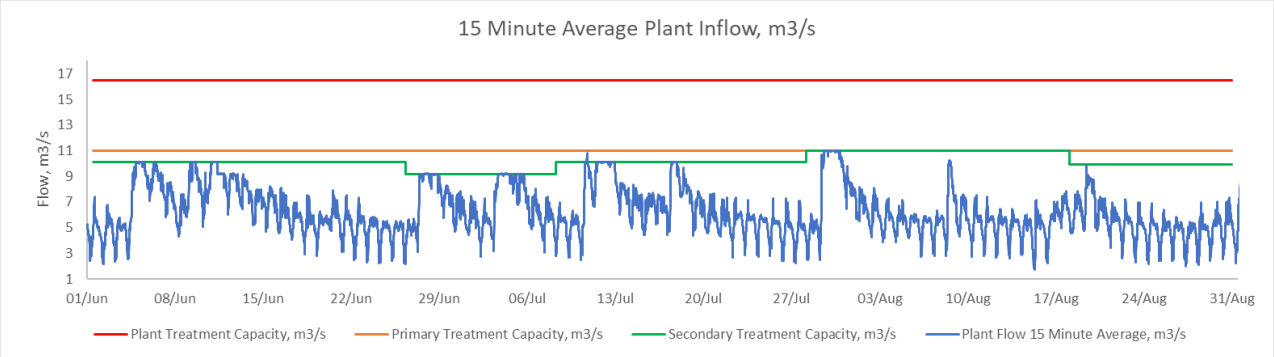


2 OPERATIONS REPORT

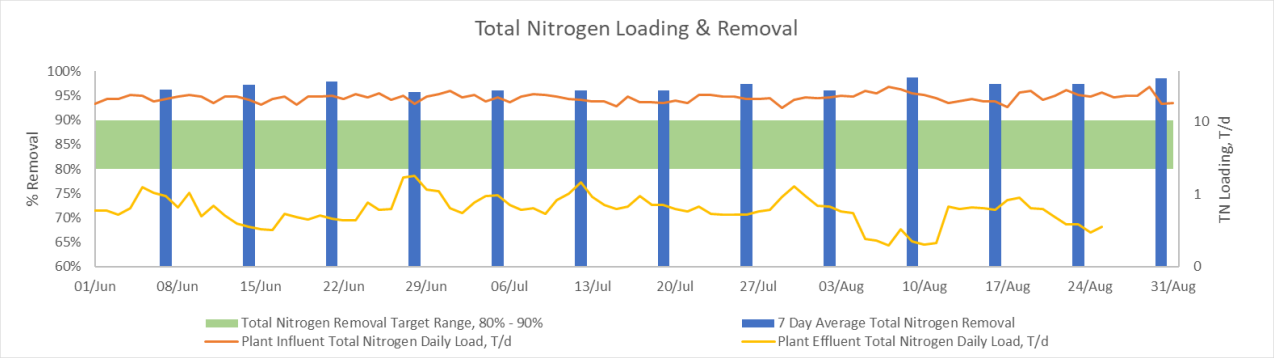
Liquid Process

15-minute interval plant flow

There were eleven RC Filter bypass events during this quarter. Please refer to the detailed information in the high flow diversion table. Secondary Treatment Capacity set point was 9.2 – 11.0 m^3/s in this quarter.

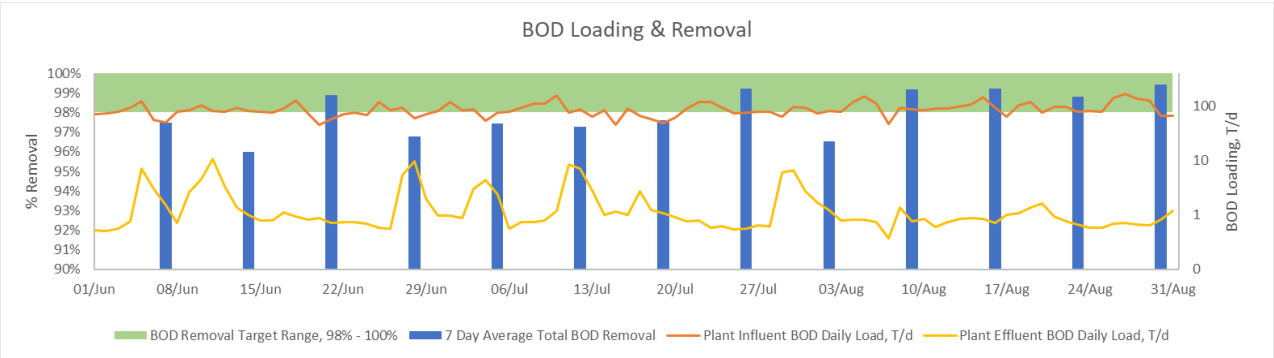


Total Nitrogen removal and loading



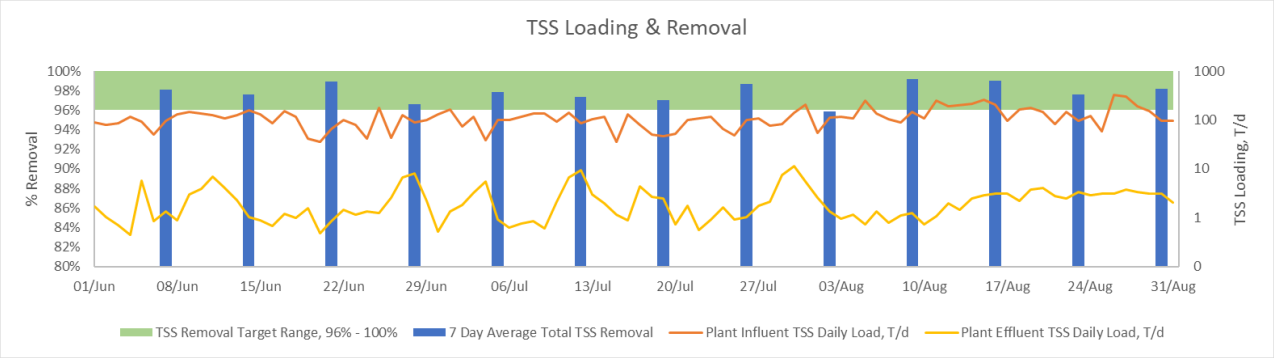
Please note logaritmic scale on secondary vertical axis (Loading, T/d).

BOD removal and loading



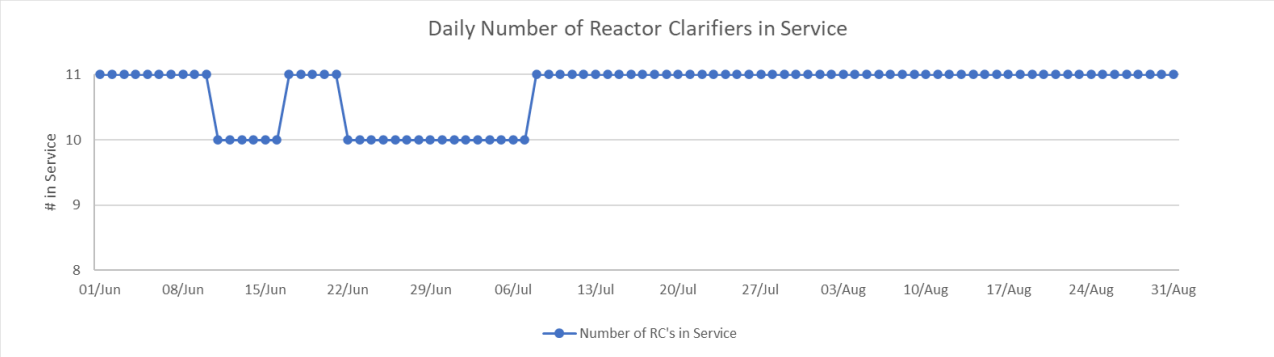
Please note logaritmic scale on secondary vertical axis (Loading, T/d). Seven weekly average BOD removals across this quarterly period were below the target range; each linked to secondary bypass events.

TSS removal and loading



Please note logaritmic scale on secondary vertical axis (Loading, T/d). The slightly lower weekly average TSS removal on 3 August is attributed to secondary treatment bypasses on 29 & 30 July; which resulted in removal rates slightly lower than usual.

Number of Reactor Clarifiers in service



Reactor-Clarifier 4 was taken out of service for maintenance repairs (scum trough) between 11 and 16 June.
Reactor-Clarifier 7 was taken out of service for baffle wall repairs between 22 June and 8 July.

UV based virus monitoring

Monitoring of enterovirus in shellfish samples is required in accordance with Special Condition 25(6) of Consent 30083 if one of the following conditions are triggered:

- Two consecutive exceedances of 80 cfu/100 mL for enterococci indicator bacteria (i.e., when no high flow diversion is occurring), measured twice daily in the UV effluent;
- Maximum UV dose is being applied to high flow diversion flows (> 9 m^3/s) in accordance with required levels, but the applied UV dose is less than 35 mWs/cm^2 for more than 2 hours in non-high flow diversion channels; or
- In the event that effluent from the WWTP has not been subjected to the appropriate UV dose.

Three such incidents occurred throughout this quarterly reporting period; these are explained in Table 2-1.

Table 2-1: Shellfish sampling triggered by Special Condition 25(6) for this quarterly reporting period.

Date of Event	Trigger for shellfish collection/ Cause of event	Day Two Shellfish Sampling results	Week Two Shellfish Sampling results
8-Aug-25	Multiple UV channels had an applied UV dose rate of < 35 mWs/cm^2 for various lengths of time – there was no bypass at the time. The low UV dose rate did not exceed 2 hours at any one time, but some channels (channel 2 and 7) had multiple events totalling more than 2 hours collectively.	13 Aug 2025 (Lab Ref: 250812-151) Enterovirus: all <1.0 pfu/10g ww Adenovirus: all <4.0 MPN/100g ww	Covered by 48hr sampling undertaken on 22 August.
19-Aug-25	Issues at UV plant between approximately 5pm and 10:30pm meant multiple channels with an applied UV dose rate of < 35 mWs/cm^2 for longer than 2 hours – there was no bypass at the time. Shellfish monitoring was undertaken on the 22nd. Both this event and the event on the 8th were linked to solids carry over due to solids stream equipment (Gravity Belt Thickener, GBT) breakdown. Therefore, there was reduced process capacity, causing greater solids concentrations in the secondary treated effluent. During rain events (not triggering secondary bypass) the elevated flow reduced settlement time for effluent through the clarifiers. The resulting higher solids content & increased flow rate at the UV plant reduced the efficiency of UV treatment, resulting in a lower applied dose rate. This incident was compounded by UV Channel 5 not kicking in when required due to low water level in the channel; a result of a leaking penstock. Channel 5 was set to higher duty (duty 1), meaning it is operational at all times to avoid this occurring again. The GBTs in the solids stream have returned to normal services.	22 Aug 2025 (Lab Ref: 250822-104) Enterovirus: all <1.0 pfu/10g ww Adenovirus: all <4.0 MPN/100g ww	Covered by 48hr sampling undertaken on 2 September.
31-Aug-25	A power dip relating to a network issue on Sunday 31 August impacted the plant for approximately 30 mins. There was low or no applied UV to all channels for this period. Power to the site was not lost completely during this time, and back-up power sources were not engaged. It is believed the source of the power dip may have been the severe wind/weather. Subsequently, two consecutive enterococci results in exceedance of the trigger level (80 cfu/100ml) were received from monitoring undertaken at the UV plant outlet following this incident. Samples were collected on 31 August (96 cfu/100ml) and 1 September (110 cfu/100ml).	2 Sept 2025 (Lab Ref: 250902-144) Enterovirus: all <1.0 pfu/10g ww Adenovirus: all <4.0 MPN/100g ww	N/A

Temporary warning signage was placed at the seven locations, as indicated on Figure 2-1 below, following notification of the first incident on 11 August. The signs remained in place until the final test results were received from the 2 September sampling confirming no virus was detected in the shellfish samples. In addition, a warning flag was posted on the Safeswim website, as per Figure 2-2.

Figure 2-1: Example and locations of shellfish warning signage put out in response to plant UV incidents (yellow dots); the red dot indicates the permanent signage near the discharge.

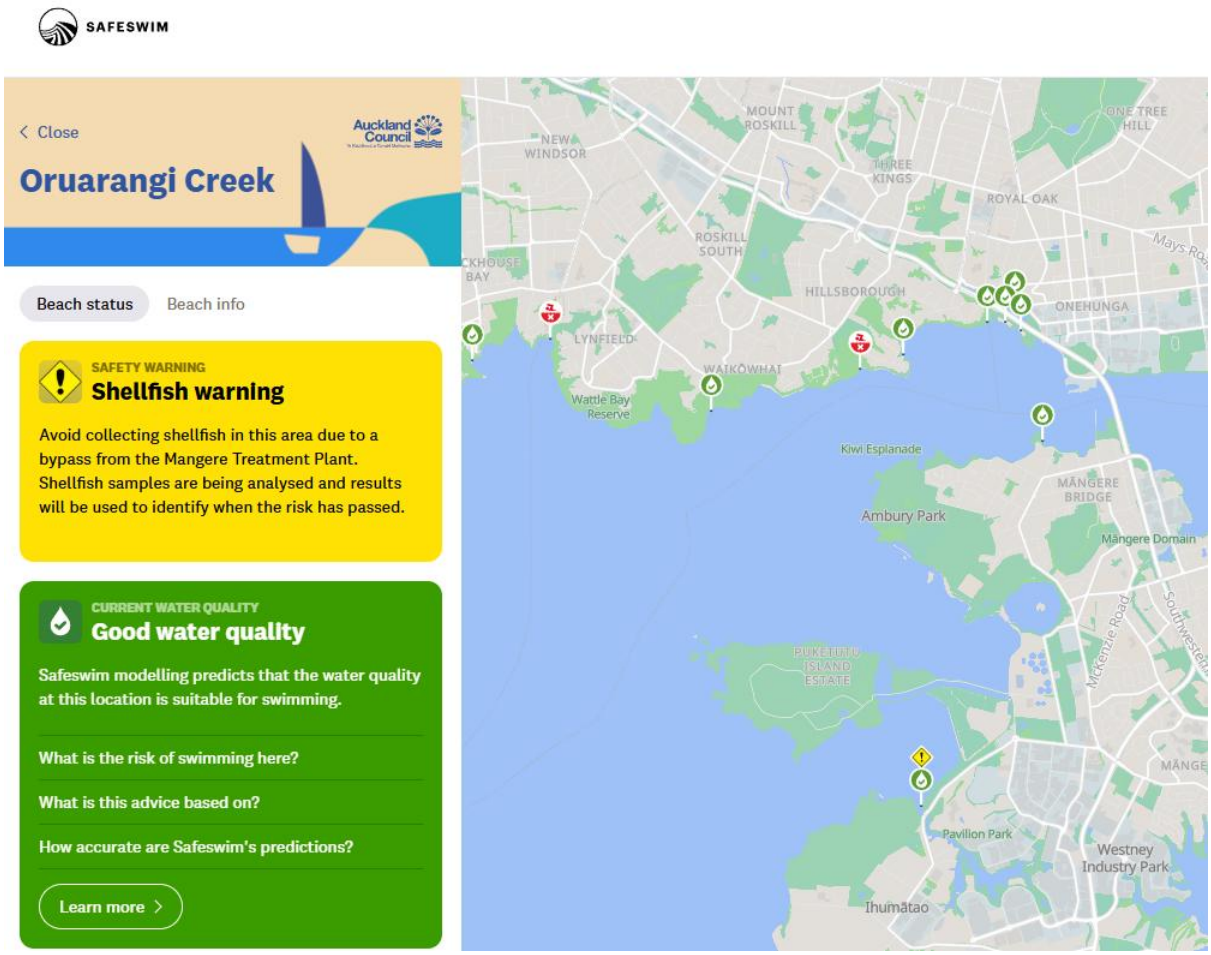


Figure 2-2: Screenshot from the Safeswim website displaying the shellfish warning message.

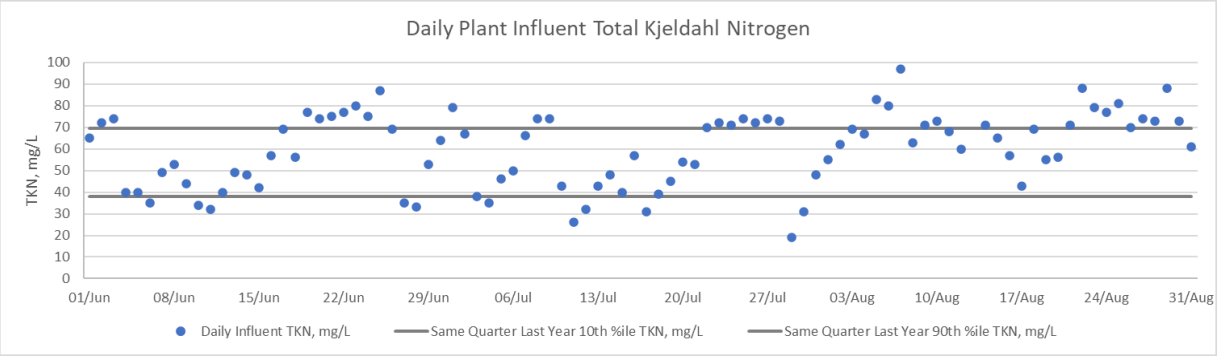
RC Filter High Flow Diversion event summary

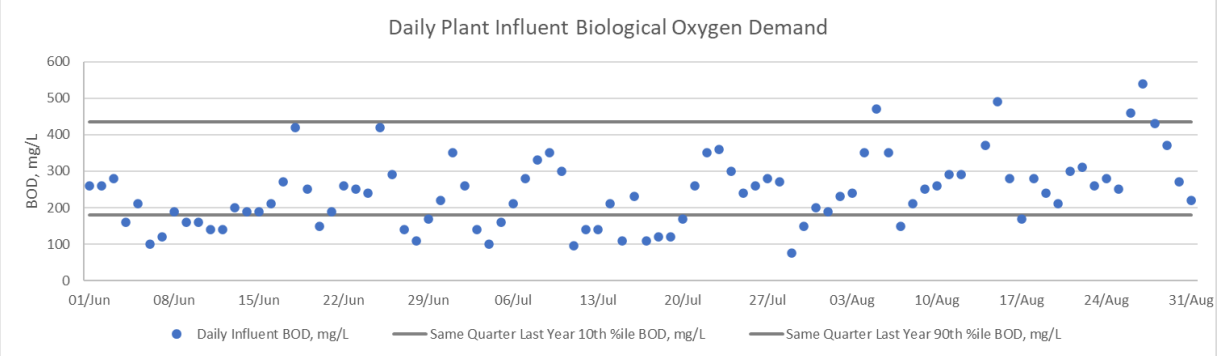
Event Number	Start Date & Time	End Date & Time	Duration	Diverted Volume (m^3)	Secondary treated volume above 9m^3/s (m^3)
#2023-01	21/07/2023 5:48	22/07/2023 0:14	17 hrs 57 mins	172,643	Data not available*
#2023-02	20/08/2023 12:06	20/08/2023 13:39	55 mins	4,208	Data not available*
#2023-03	5/09/2023 3:43	6/09/2023 3:01	1 hr 16 mins	5,644	Data not available*
#2023-04	11/09/2023 18:50	12/09/2023 2:11	7 hrs 8 mins	41,148	Data not available*
#2023-05	24/09/2023 0:09	24/09/2023 11:32	5 hrs 50 mins	40,404	Data not available*
#2023-06	26/09/2023 2:24	26/09/2023 5:28	2 hrs 35 mins	11,106	Data not available*
#2023-07	3/11/2023 13:10	3/11/2023 19:30	2 hrs 48 mins	22,885	Data not available*
#2023-08	19/11/2023 14:03	19/11/2023 14:54	25 mins	1,972	Data not available*
#2023-09	29/12/2023 15:49	30/12/2023 17:35	23 hrs 32 mins	38,075	Data not available*
#2023-10	20/04/2024 13:09	20/04/2024 22:50	9 hrs 41 mins	67,178	Data not available*
#2023-11	20/05/2024 23:23	21/05/2024 22:50	23 hrs 27 mins	136,240	Data not available*
#2023-12	14/06/2024 4:33	15/06/2024 8:23	27 hrs 50 mins	162,264	Data not available*
#2023-13	16/06/2024 23:36	17/06/2024 19:01	19 hrs 25 mins	92,356	Data not available*
#2023-14	23/06/2024 6:18	24/06/2024 2:29	18 hrs 11 mins	98,975	Data not available*
#2024-01	20/07/2024 1:53	21/07/2024 14:35	1 d 12 hrs 42 mins	55,118	Data not available*
#2024-02	17/08/2024 19:17	18/08/2024 0:10	4hrs 54 mins	19,872	Data not available*
#2024-03	1/09/2024 4:24	1/09/2024 16:37	12hrs 17 mins	83,052	4,773
#2024-04	20/09/2024 14:39	21/09/2024 0:35	9 hrs 54 mins	58,334	47,431
#2024-05	3/10/2024 1:39	3/10/2024 15:30	13 hrs 54 mins	66,096	21,690
#2024-06	15/11/2024 14:35	15/11/2024 21:35	7 hrs	49,233	13,374
#2025-1	4/04/2025 9:06	5/04/2025 2:31	12 hrs 52 mins	87,460	32,087
#2025-2	19/04/2025 3:43	19/04/2025 17:24	12 hrs 9 mins	113,349	16,283
#2025-3	28/04/2025 3:42	28/04/2025 12:20	2 hrs 32 mins	13,055	1,398
#2025-4	30/04/2025 11:13	30/04/2025 12:08	35 mins	2,632	1,406
#2025-5	2/05/2025 15:05	2/05/2025 19:08	3 hrs 17 mins	15,217	4,527
#2025-6	9/05/2025 16:47	10/05/2025 16:53	18 hrs 5 mins	151,573	20,225
#2025-7	27/05/2025 8:24	27/05/2025 14:48	6 hrs 24 mins	36,498	21,989
#2025-8	29/05/2025 23:18	30/05/2025 2:03	2 hrs 48 mins	4,951	4,552
#2025-9	5/06/2025 22:23	6/06/2025 13:41	15 hrs 24 mins	91,585	61,405
#2025-10	9/06/2025 10:05	9/06/2025 15:05	5 hrs	15,133	13,320
#2025-11	10/06/2025 20:53	11/06/2025 21:59	1 day 1 hr 5 mins	205,387	58,992
#2025-12	12/06/2025 9:43	12/06/2025 19:01	9 hrs 18 mins	58,763	4,626
#2025-13	27/06/2025 11:06	28/06/2025 19:30	24 hrs 24 mins	189,565	13,984
#2025-14	3/07/2025 17:00	4/07/2025 13:54	21 hrs 6 mins	136,046	14,455
#2025-15	5/07/2025 0:00	5/07/2025 15:17	15 hrs 17 mins	10,903	5,133
#2025-16	11/07/2025 14:15	12/07/2025 21:03	1 d 7 hrs 12 mins	258,196	124,158
#2025-17	17/07/2025 10:28	17/07/2025 21:00	10 hrs 33 mins	79,571	41,842
#2025-18	29/07/2025 14:28	30/07/2025 16:00	1 d 2 hrs 24 mins	201,295	173,984
#2025-19	19/08/2025 10:12	19/08/2025 10:18	6 mins	411	312

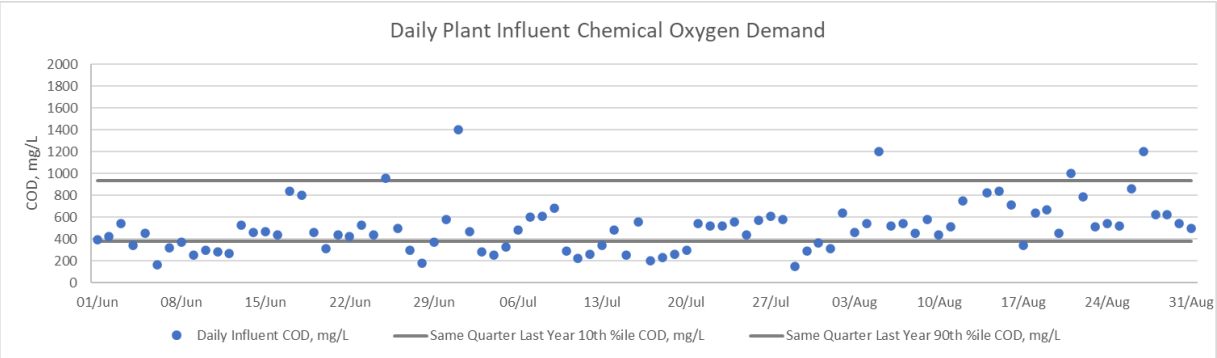
Note: High Flow Diversion event number convention follows the financial year, rather than calendar year.

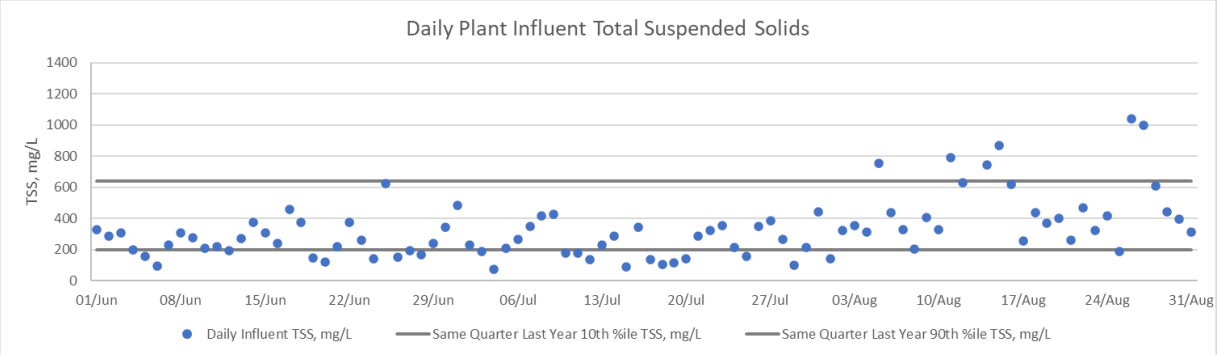
*Volume treated through secondary treatment above the required 9m^3/s started being reported from September 2024.

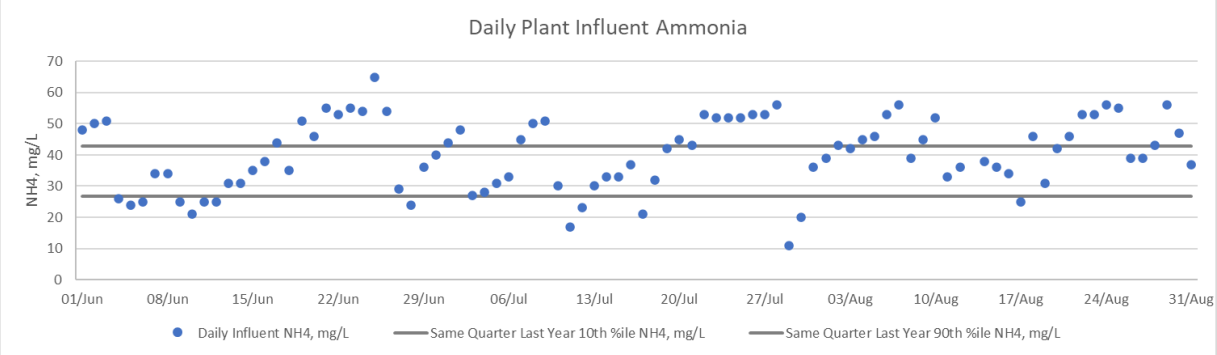
Influent chemistry monitoring

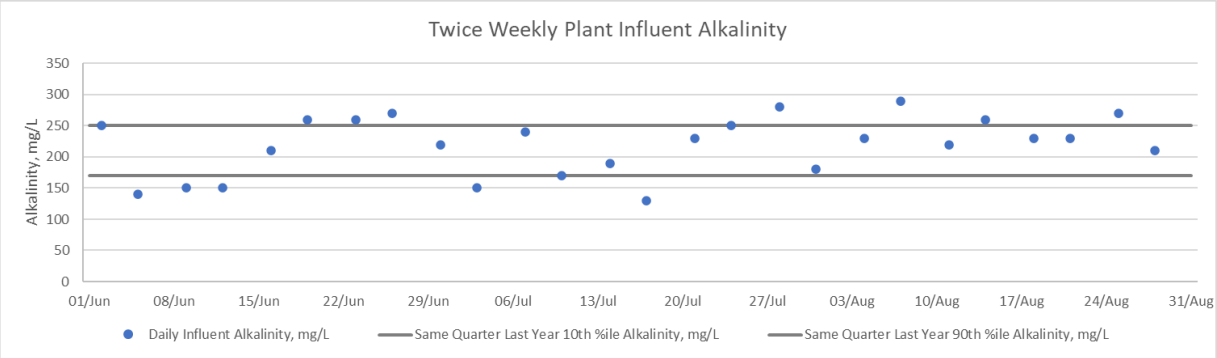


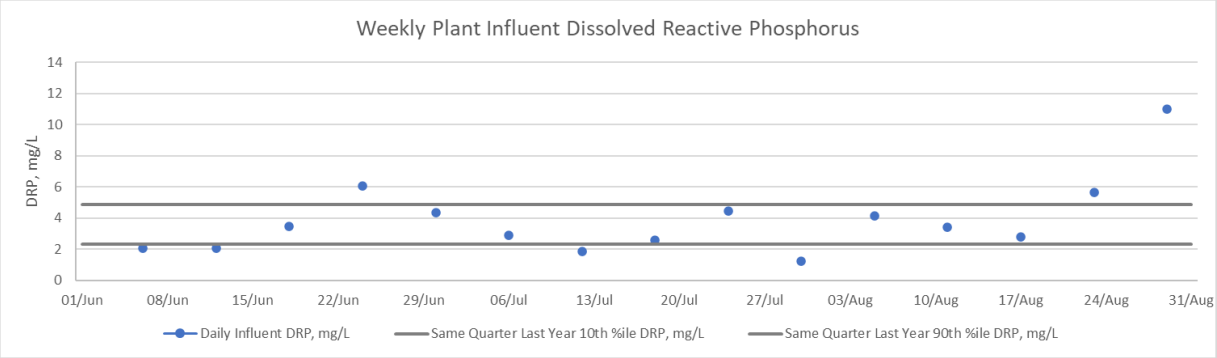






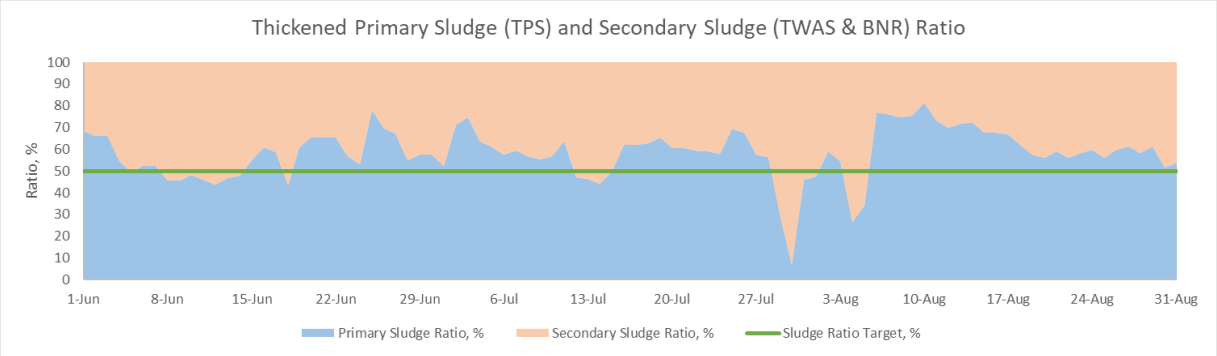

Daily Plant Influent Ammonia
NH4, mg/L
70
60
50
40
30
20
10
0
01/Jun
08/Jun
15/Jun
22/Jun
29/Jun
06/Jul
13/Jul
20/Jul
27/Jul
03/Aug
10/Aug
17/Aug
24/Aug
31/Aug
Daily Influent NH4, mg/L
Same Quarter Last Year 10th %ile NH4, mg/L
Same Quarter Last Year 90th %ile NH4, mg/L


Twice Weekly Plant Influent Alkalinity
Alkalinity, mg/L
350
300
250
200
150
100
50
0
01/Jun
08/Jun
15/Jun
22/Jun
29/Jun
06/Jul
13/Jul
20/Jul
27/Jul
03/Aug
10/Aug
17/Aug
24/Aug
31/Aug
Daily Influent Alkalinity, mg/L
Same Quarter Last Year 10th %ile Alkalinity, mg/L
Same Quarter Last Year 90th %ile Alkalinity, mg/L


Weekly Plant Influent Dissolved Reactive Phosphorus
DRP, mg/L
14
12
10
8
6
4
2
0
01/Jun
08/Jun
15/Jun
22/Jun
29/Jun
06/Jul
13/Jul
20/Jul
27/Jul
03/Aug
10/Aug
17/Aug
24/Aug
31/Aug
Daily Influent DRP, mg/L
Same Quarter Last Year 10th %ile DRP, mg/L
Same Quarter Last Year 90th %ile DRP, mg/L

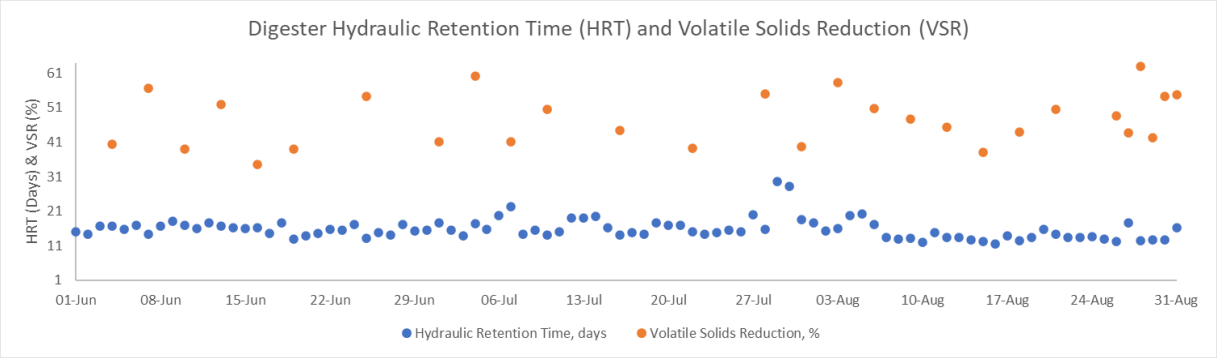
Solids Process

Primary and Secondary sludge ratio



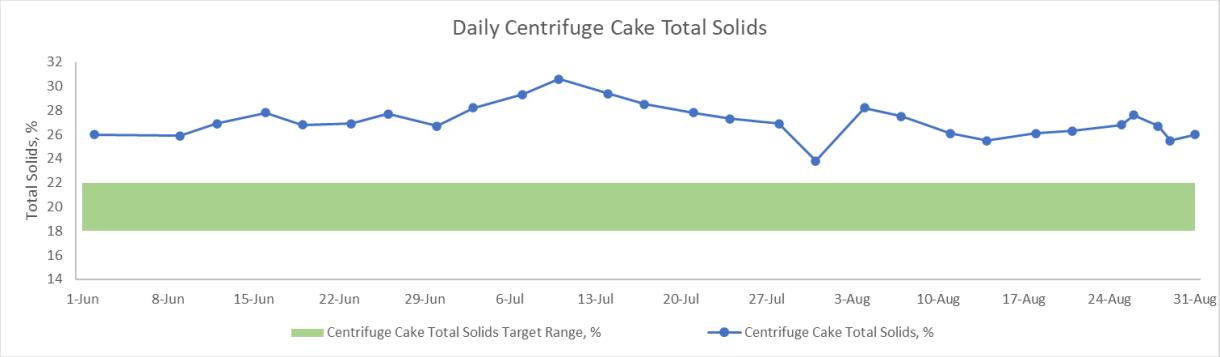
TPS pump suction line was blocked between 28 July and 5 August which caused low TPS flow during that period resulting in low Primary sludge ratio.

Digester performance



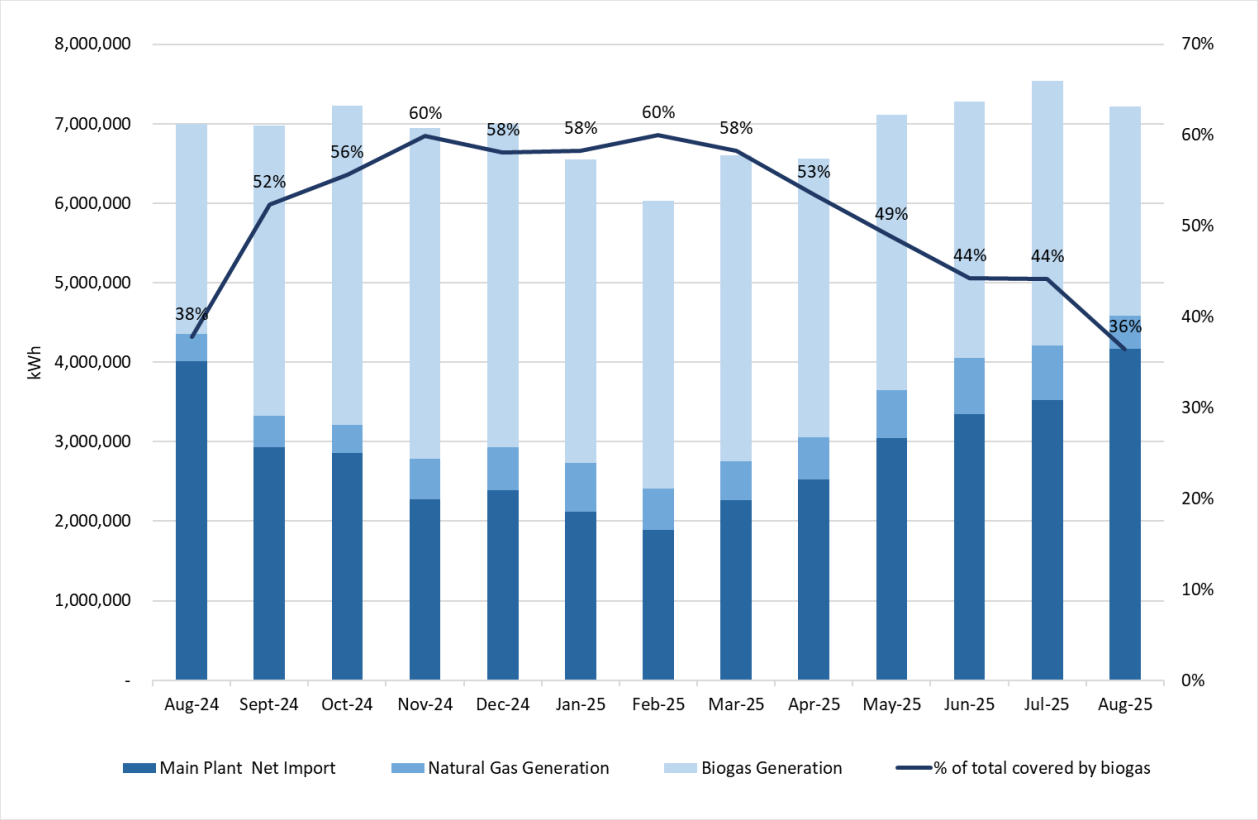
The slightly higher HRT on 29 & 30 July was due to reduced TPS flow because of the line blockage. Feed to the digester was also reduced, resulting in higher HRT.

Dewatering performance



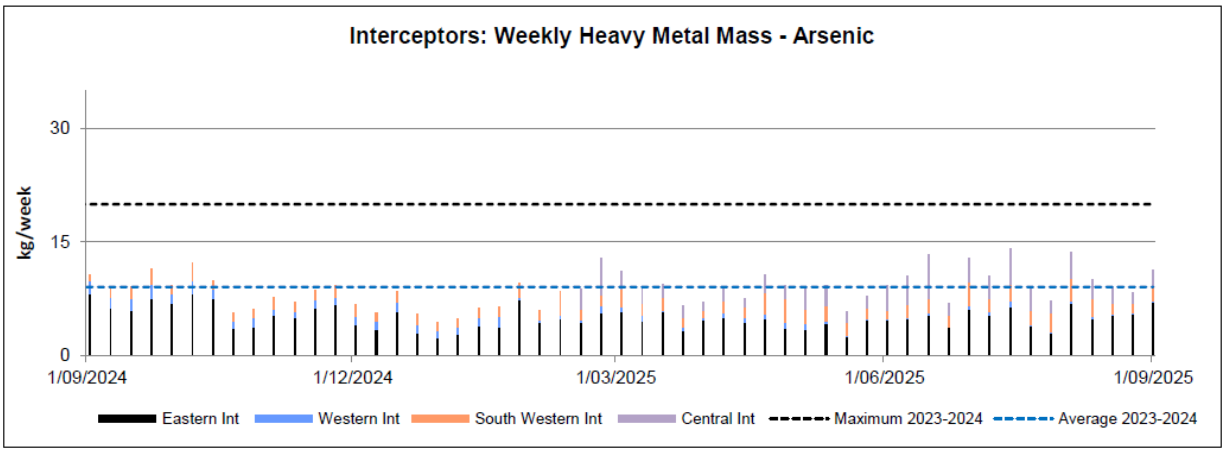
Centrifuge cake solids are above the target.

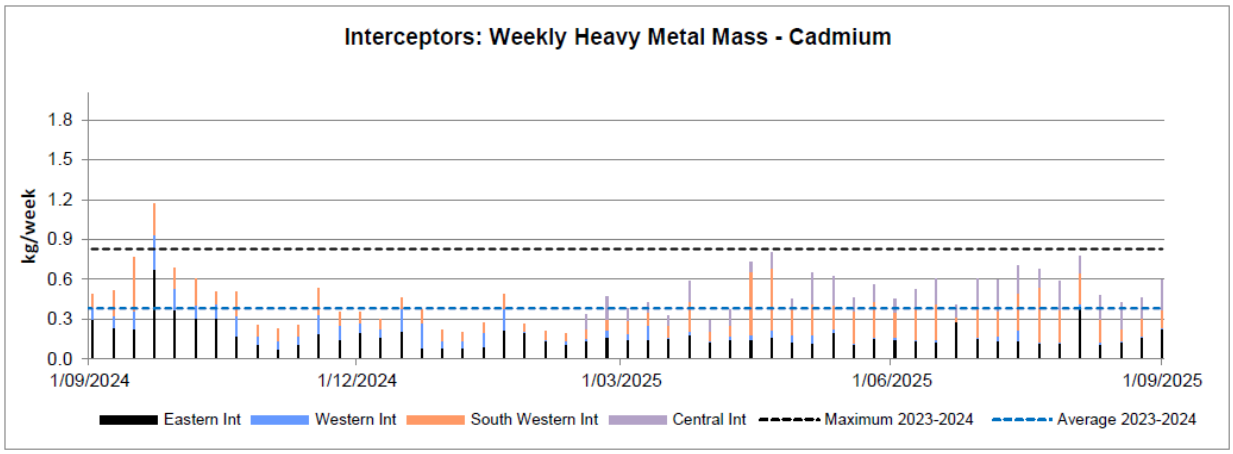
Imported Energy vs Biogas Generated Energy

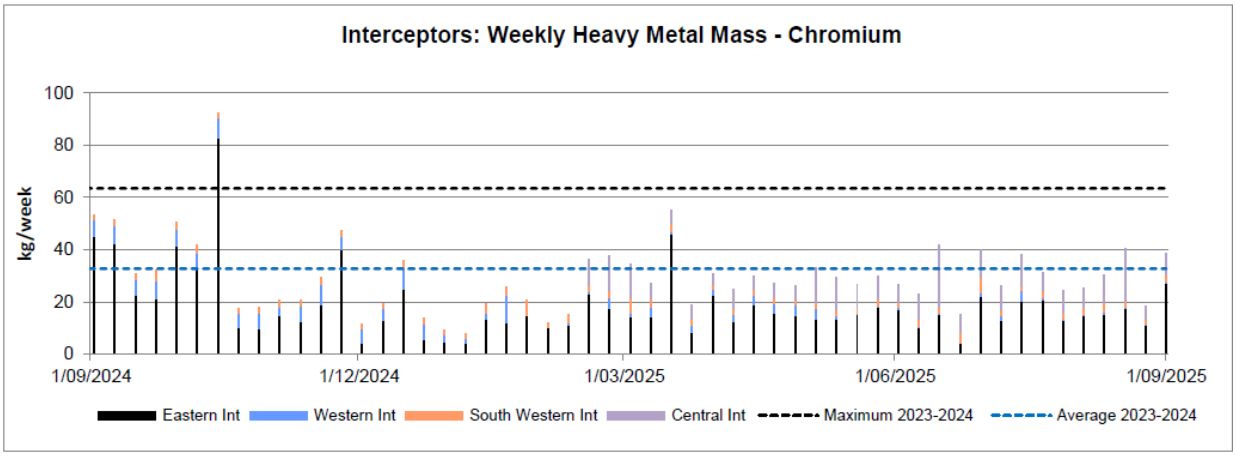


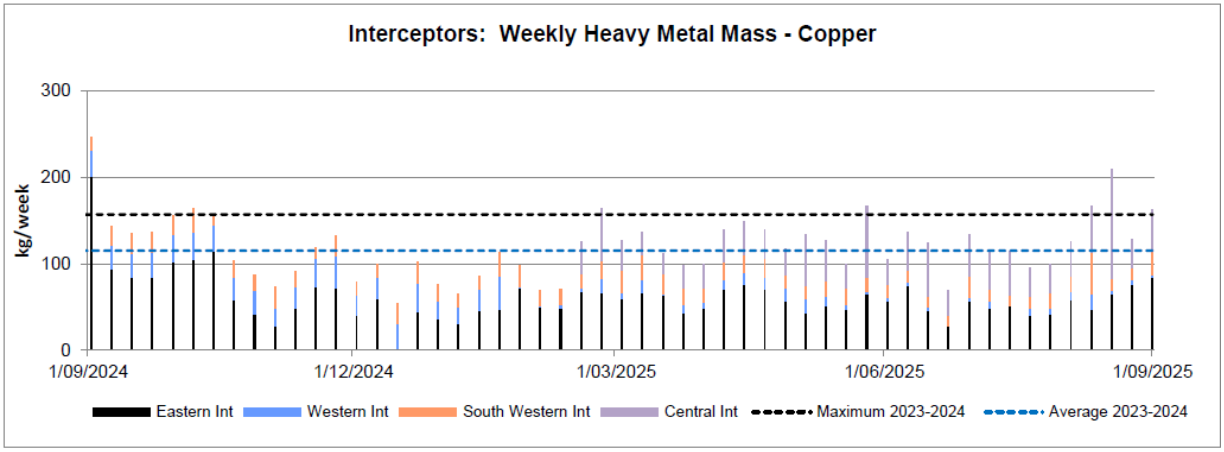
3 INFLUENT MONITORING

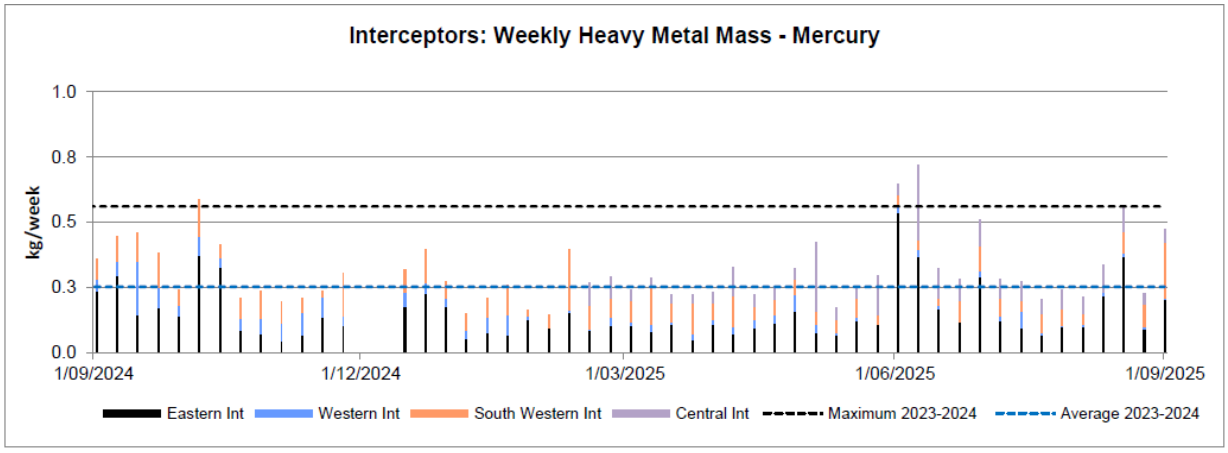
Heavy Metals – Interceptors

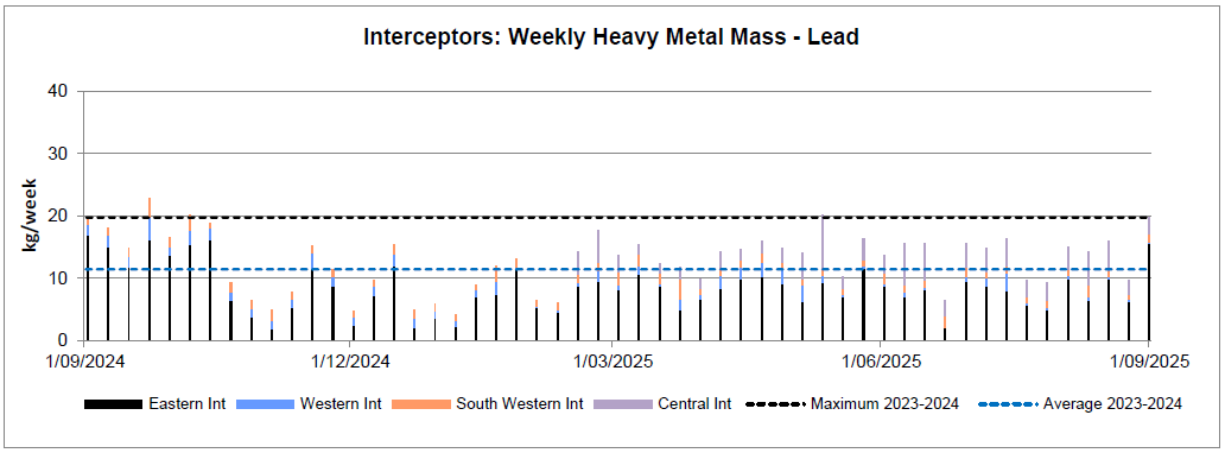


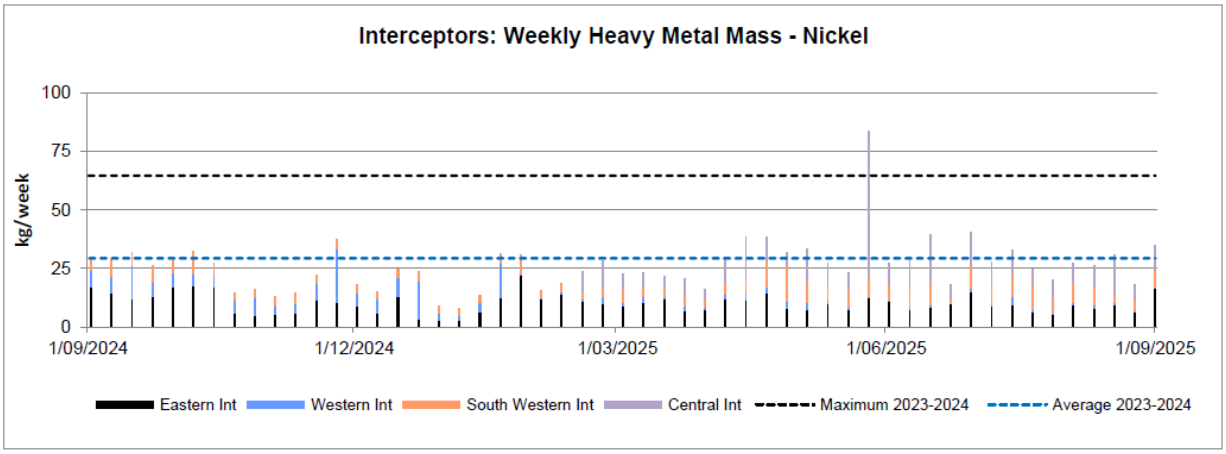


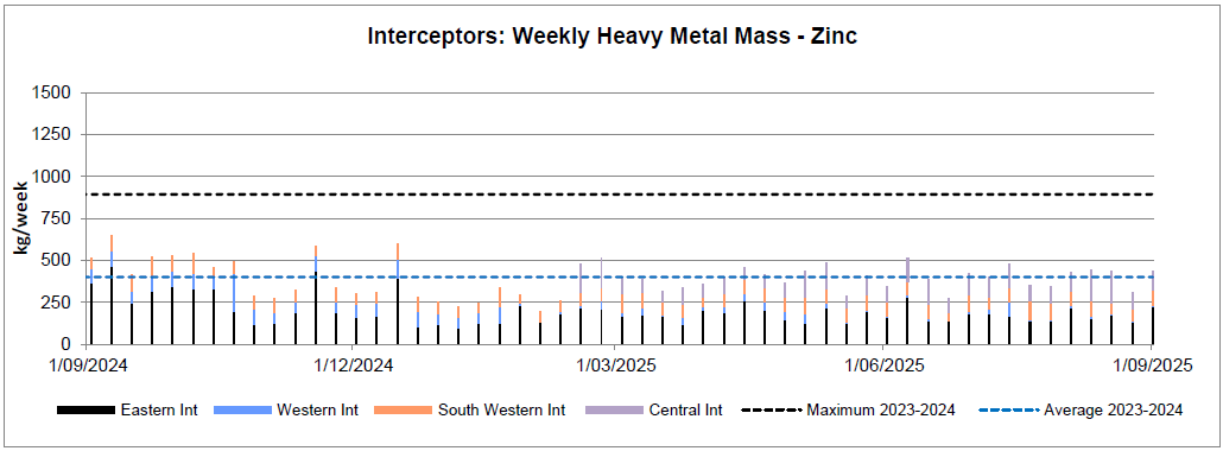



Interceptors: Weekly Heavy Metal Mass - Copper
kg/week
300
200
100
0
1/09/2024
1/12/2024
1/03/2025
1/06/2025
1/09/2025
Eastern Int
Western Int
South Western Int
Central Int
Maximum 2023-2024
Average 2023-2024

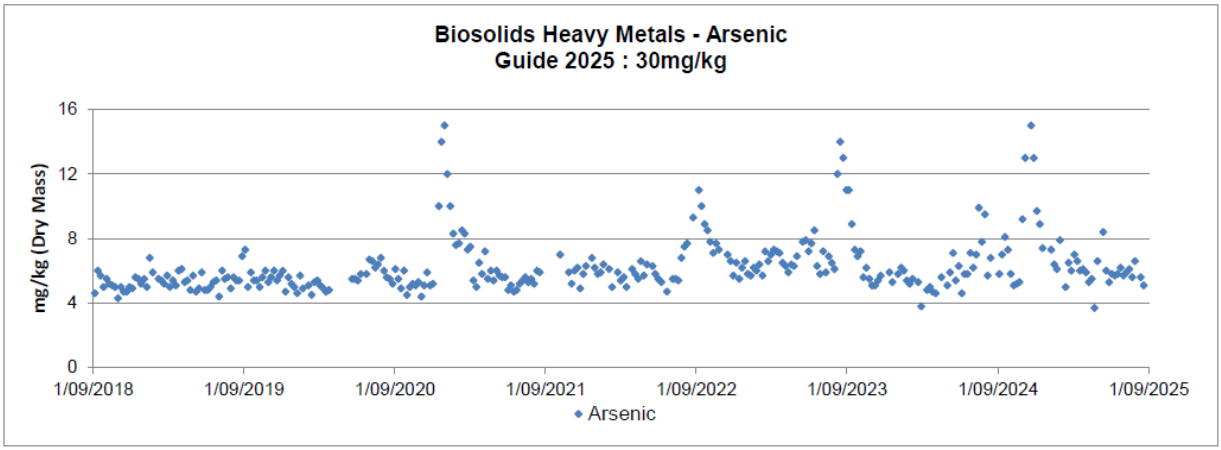

Interceptors: Weekly Heavy Metal Mass - Mercury
kg/week
1.0
0.8
0.5
0.3
0.0
1/09/2024
1/12/2024
1/03/2025
1/06/2025
1/09/2025
Eastern Int
Western Int
South Western Int
Central Int
Maximum 2023-2024
Average 2023-2024

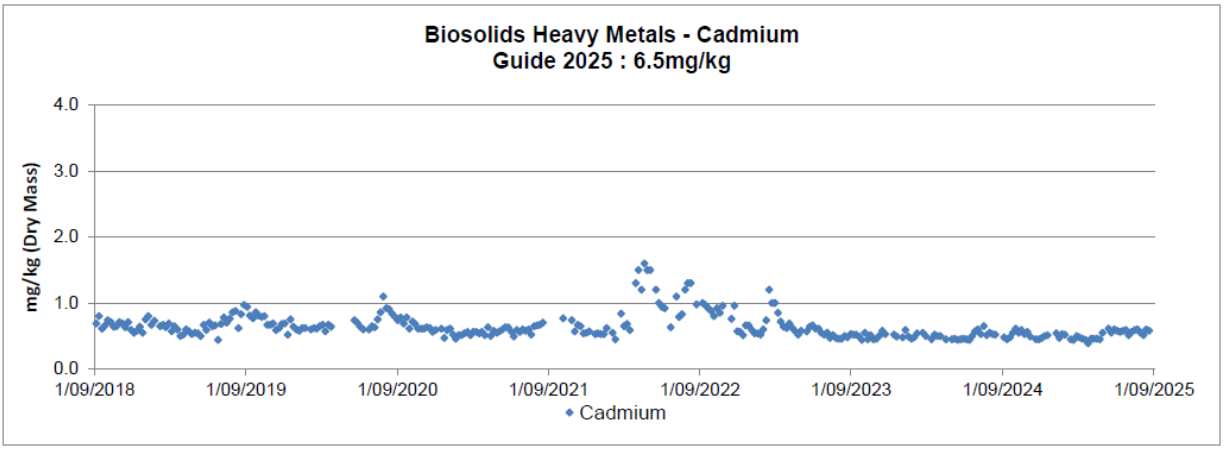

Interceptors: Weekly Heavy Metal Mass - Lead
kg/week
40
30
20
10
0
1/09/2024
1/12/2024
1/03/2025
1/06/2025
1/09/2025
Eastern Int
Western Int
South Western Int
Central Int
Maximum 2023-2024
Average 2023-2024

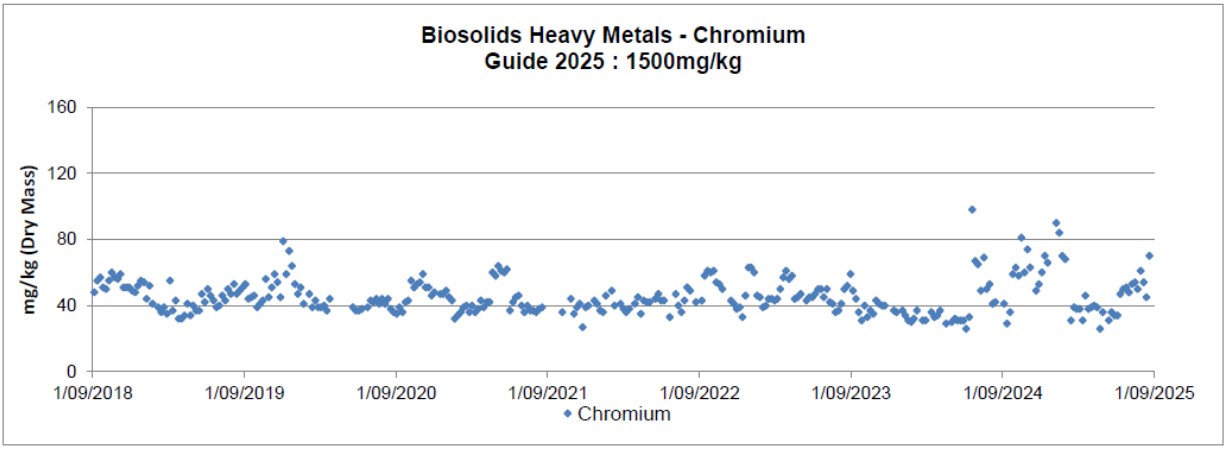

Interceptors: Weekly Heavy Metal Mass - Nickel
kg/week
100
75
50
25
0
1/09/2024
1/12/2024
1/03/2025
1/06/2025
1/09/2025
Eastern Int
Western Int
South Western Int
Central Int
Maximum 2023-2024
Average 2023-2024

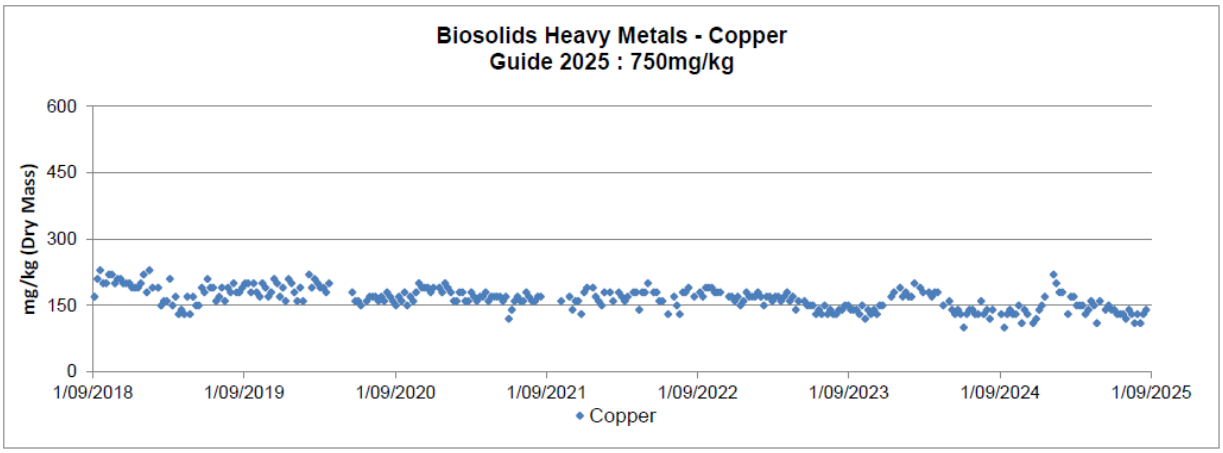

Interceptors: Weekly Heavy Metal Mass - Zinc
kg/week
1500
1250
1000
750
500
250
0
1/09/2024
1/12/2024
1/03/2025
1/06/2025
1/09/2025
Eastern Int
Western Int
South Western Int
Central Int
Maximum 2023-2024
Average 2023-2024

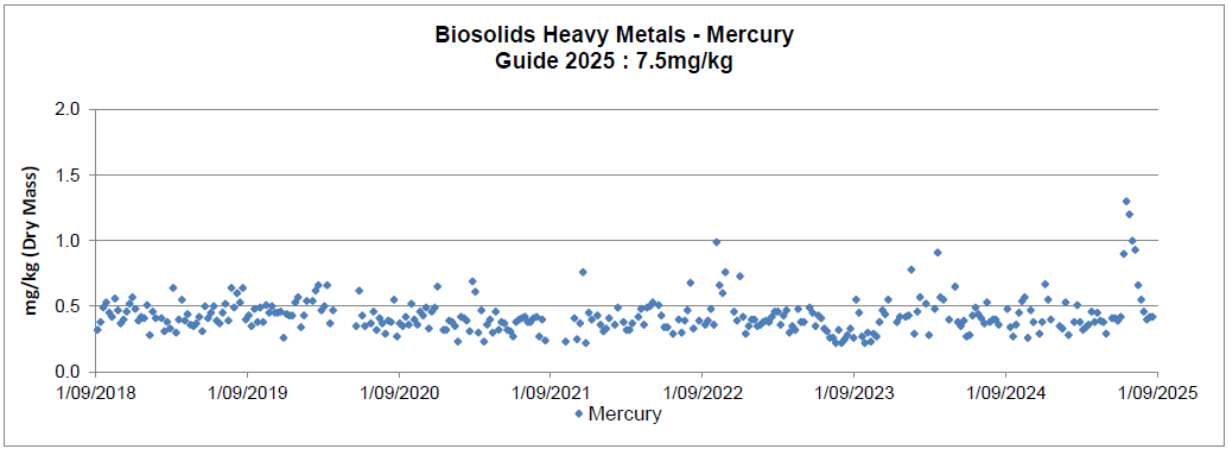
Heavy Metals – Long-term trend in Biosolids

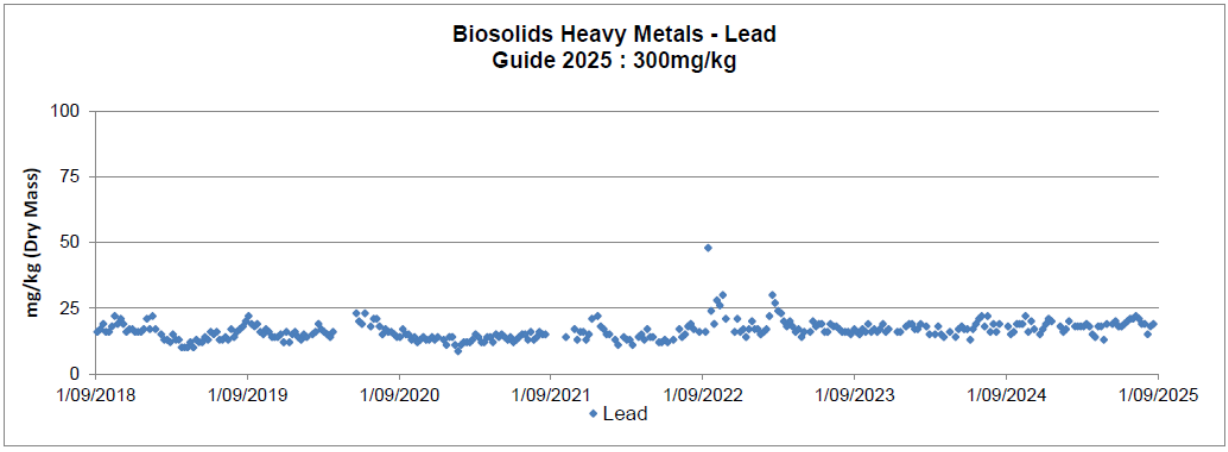


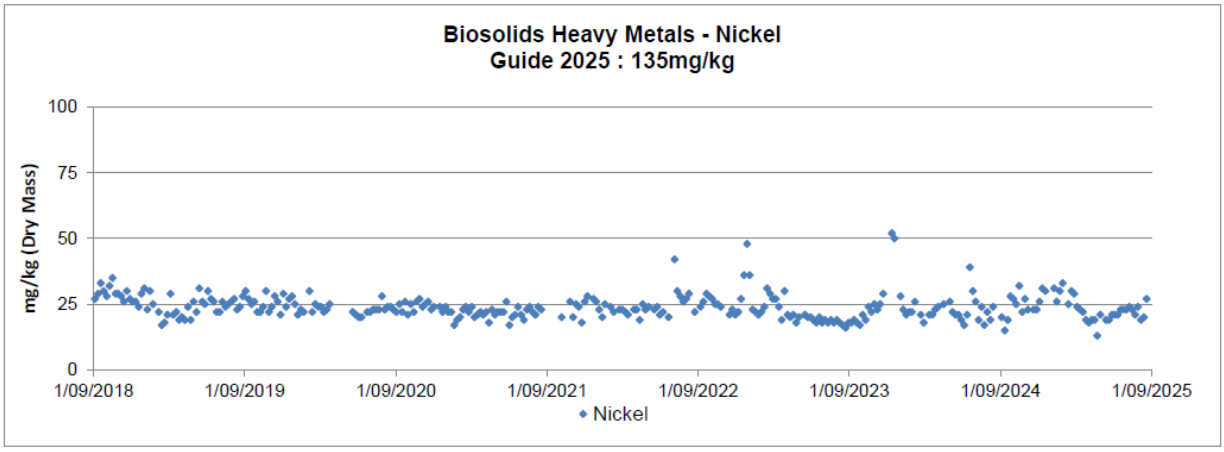


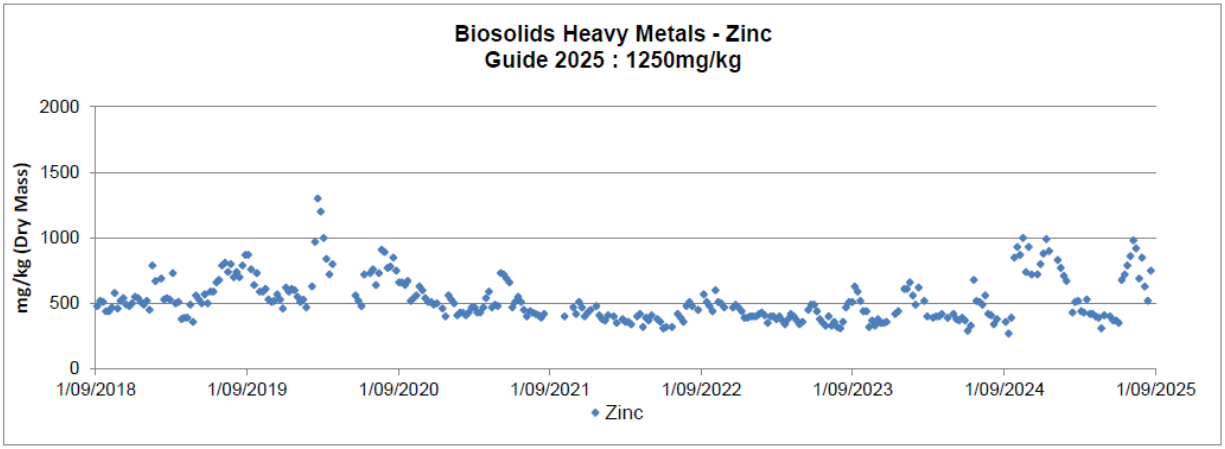



Biosolids Heavy Metals - Copper
Guide 2025 : 750mg/kg
mg/kg (Dry Mass)
600
450
300
150
0
1/09/2018
1/09/2019
1/09/2020
1/09/2021
1/09/2022
1/09/2023
1/09/2024
1/09/2025
Copper


Biosolids Heavy Metals - Mercury
Guide 2025 : 7.5mg/kg
mg/kg (Dry Mass)
2.0
1.5
1.0
0.5
0.0
1/09/2018
1/09/2019
1/09/2020
1/09/2021
1/09/2022
1/09/2023
1/09/2024
1/09/2025
Mercury


Biosolids Heavy Metals - Lead
Guide 2025 : 300mg/kg
mg/kg (Dry Mass)
100
75
50
25
0
1/09/2018
1/09/2019
1/09/2020
1/09/2021
1/09/2022
1/09/2023
1/09/2024
1/09/2025
Lead


Biosolids Heavy Metals - Nickel
Guide 2025 : 135mg/kg
mg/kg (Dry Mass)
100
75
50
25
0
1/09/2018
1/09/2019
1/09/2020
1/09/2021
1/09/2022
1/09/2023
1/09/2024
1/09/2025
Nickel


Biosolids Heavy Metals - Zinc
Guide 2025 : 1250mg/kg
mg/kg (Dry Mass)
2000
1500
1000
500
0
1/09/2018
1/09/2019
1/09/2020
1/09/2021
1/09/2022
1/09/2023
1/09/2024
1/09/2025
Zinc

4 MIDGE CONTROL REPORT

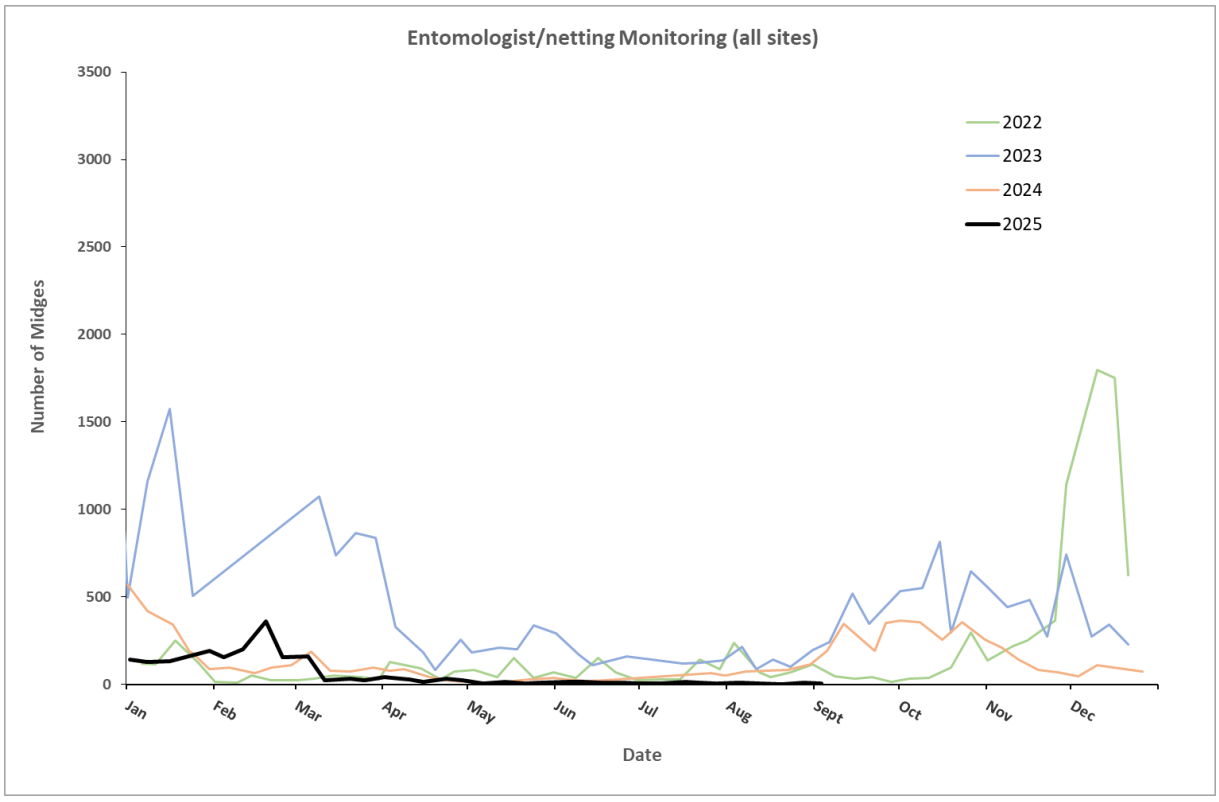
Situation

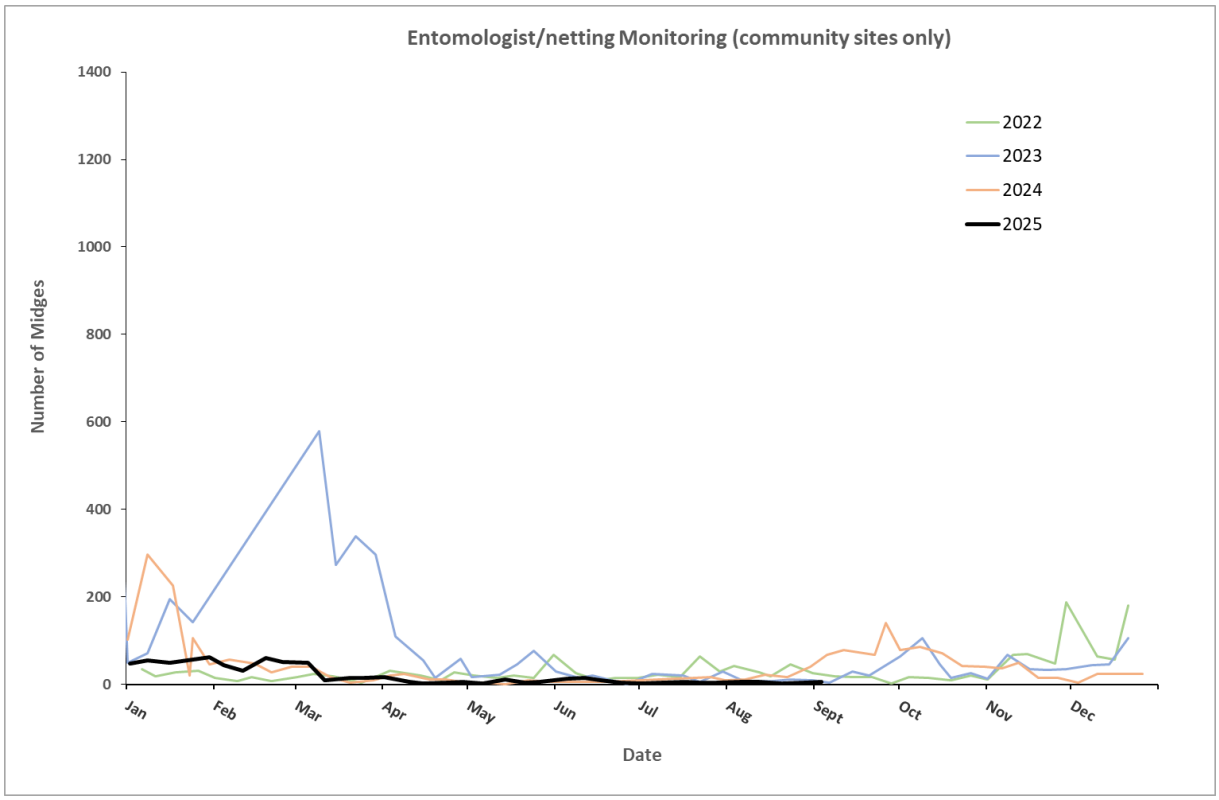
- Midge numbers across all sites are low, which is a normal trend for this time of year due to low water temperatures. The regular winter treatment schedule has been followed during this period.
- The net monitoring done by an entomologist has been the most reliable source for accurate midge counts over the past few years. The numbers for the current quarter are generally lower than in previous years. The current regimen of midge control appears to be working well.
- The Audit Group has approved for monitoring via emergence traps to be discontinued. This is subject to the current treatment working well as demonstrated by the entomologist monitoring, light trap monitoring and complaint recording. If these monitoring methods demonstrate an ongoing midge nuisance issue in the future, then the Audit Group may request the emergence trap monitoring to be reinstated.
- Light trap monitoring was paused for a period in 2024 while emergence and light traps efficacy was being discussed and was resumed from October 2024.

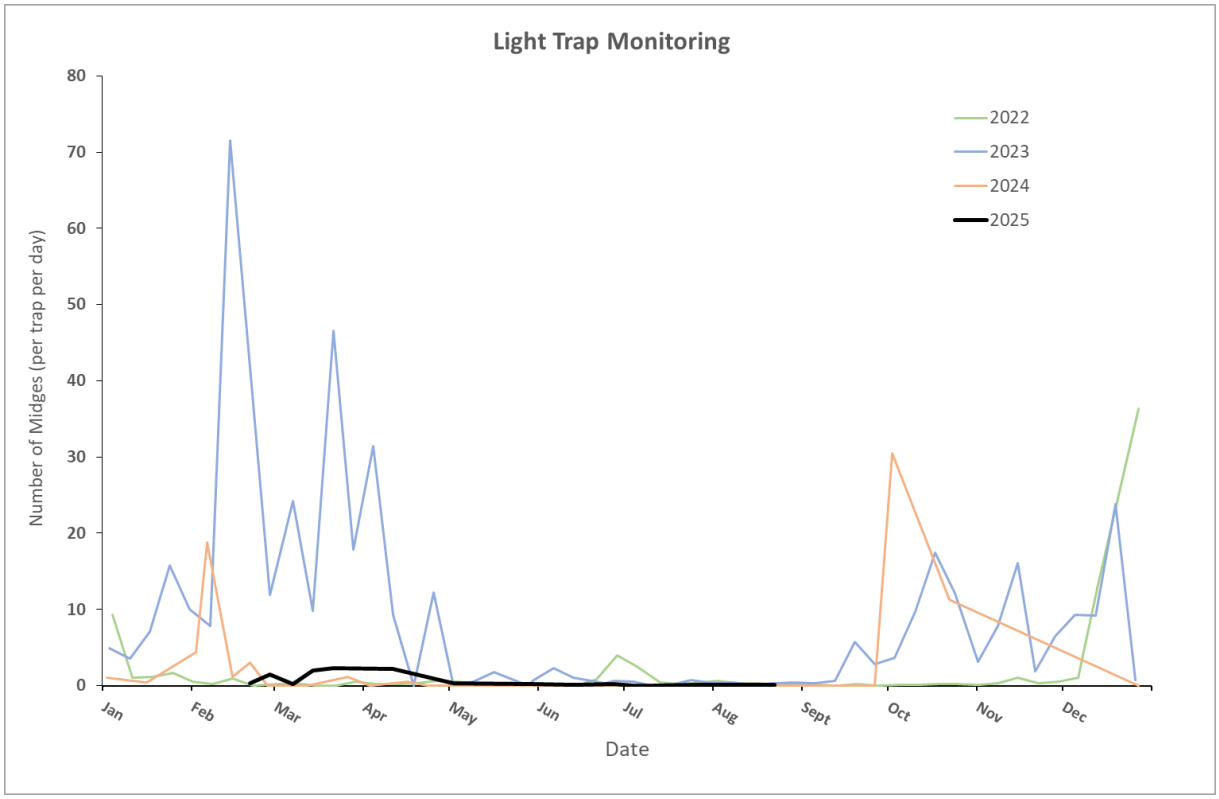
Treatment Schedule

Chain Dragging:	September – March:	Weekly
	April – August:	Fortnightly (to be increased to weekly if required).
Contact Insecticide:	August – April:	Every 3 weeks (to be increased to fortnightly if required).

Results




Entomologist/netting Monitoring (community sites only)
Number of Midges
1400
1200
1000
800
600
400
200
0
2022
2023
2024
2025
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sept
Oct
Nov
Dec
Date


Light Trap Monitoring
Number of Midges (per trap per day)
80
70
60
50
40
30
20
10
0
2022
2023
2024
2025
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sept
Oct
Nov
Dec
Date

5 ODOUR REPORT

Weekly walkover results (inside Māngere WWTP)

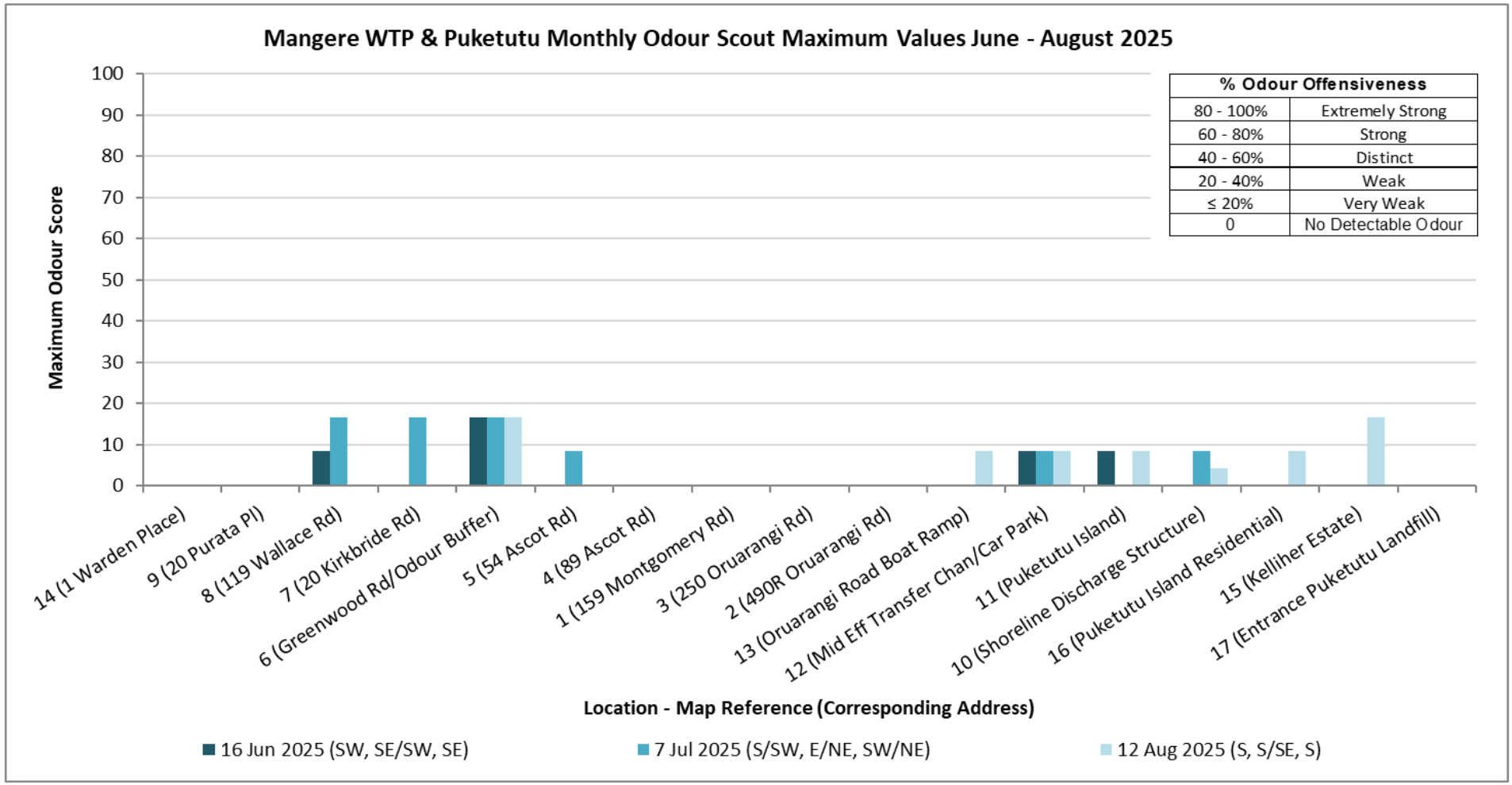
Location	5 Jun 25	18 Jun 25	26 Jun 25	30 Jun 25	11 Jul 25	18 Jul 25	21 Jul 25	28 Jul 25	6 Aug 25	14 Aug 25	19 Aug 25	25 Aug 25	Avg. quarter
Digester Area	8	17	8	17	8	8	8	17	17	8	17	17	13
DAF's/DSFT	4	4	4	8	4	0	8	4	4	4	8	8	5
GTB Biofilter	4	8	8	8	8	4	4	8	8	4	8	17	8
GBT Biofilter	8	8	8	17	17	38	8	8	17	8	0	0	11
CPB Biofilters	38	38	17	8	17	38	50	17	17	17	17	17	24
ASU Biofilters	4	17	4	17	8	4	8	8	4	38	4	38	13
BST Biofilters	8	17	8	8	8	8	8	4	17	8	17	8	10
GT/GBT Building (old)	0	0	0	0	0	17	0	0	0	0	0	0	1
GT/GBT Building (new)	0	0	0	0	0	0	0	0	8	8	0	0	1
Centrif. ASU/Biosol. Bldg.	17	17	17	17	8	38	17	8	8	38	8	38	19
Blended Sludge Tank	8	17	8	0	0	0	0	17	0	8	17	8	7
EF3	38	8	8	8	17	4	17	17	8	38	8	4	15
EF4	4	4	4	4	4	4	4	8	4	8	4	4	5
EF5	8	4	8	4	8	4	4	4	4	8	4	4	6
Splitter Box Biofilter 1	17	17	17	8	17	4	8	17	8	17	4	8	12
Splitter Box Biofilter 2	N/A	N/A	N/A	N/A	N/A	N/A	8	N/A	N/A	38	8	8	5
Splitter Box Biofilter 3	17	17	38	8	17	17	17	8	17	17	0	17	16
Splitter Box Biofilter 4	8	8	4	4	4	4	4	4	8	17	4	8	7
IPS2	8	4	8	8	0	4	4	17	38	4	4	38	11
Primary (PSTs)	17	8	17	8	8	17	17	8	8	17	17	17	13
Screens Building	17	17	17	17	8	17	17	8	17	17	17	17	15
Tertiary (Filter & UV Plant)	8	4	4	4	8	4	4	4	8	4	4	4	5
RC1, RC2, RC4	8	8	8	8	8	8	8	8	8	8	8	8	8
RC3, RC5, RC6	17	8	8	8	8	8	8	8	8	17	8	17	10
RC7, RC8, RC9	17	17	17	8	8	8	8	8	8	8	8	8	10

Notes:

N/A = Location not accessible due to ongoing construction or maintenance.

y - Odour offensiveness sco	
Extremely	
Strong	
Distinct	
Weak	
Very Weak	

Monthly walkover results (WWTP, Puketutu Island, and surrounding areas)



Note: Odour scout locations on x-axis listed clockwise from northern-most position as per Figure 5-1 below.

Monthly walkover map

Figure 5-1: Monthly Community Odour Scouting Locations.

6 CUSTOMER FEEDBACK REPORT

No feedback in relation to the Māngere WWTP performance was received during this quarter.

7 PUKETUTU ISLAND REPORT

Placement of biosolids

34,425 tonnes of biosolids material was placed at the Puketutu Biosolids Facility during this quarter. Since the commencement of operations on 1 December 2014, Watercare has placed 2,158,500 tonnes of combined biosolids and cover/construction material. The storage capacity is approximately four million tonnes, so we are at 54% completion.

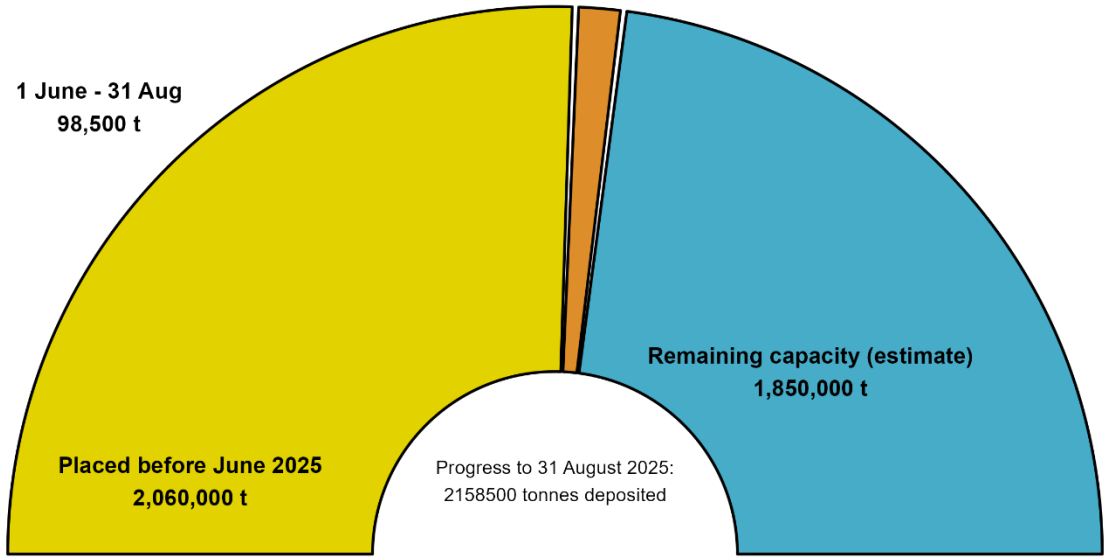


Figure 7-1: Material placement (biosolids and cover/construction) at Puketutu Biosolids Facility to date.

Biosolids truck movements were comparble to the previous quarter. There was an increase in cover and construction material deliveries to the site since approximately May to facilitate road and cell wall construction. Currently, Biosolids are deposited along the phase 5 embankment; this location doesn't allow the installation of long cells and forces the construction of multiple smaller cells. This has led to an increase in the number of cell walls to be built and subsequently more material required to be brought to the island.

Other matters

- No complaints were received during the monitoring period.

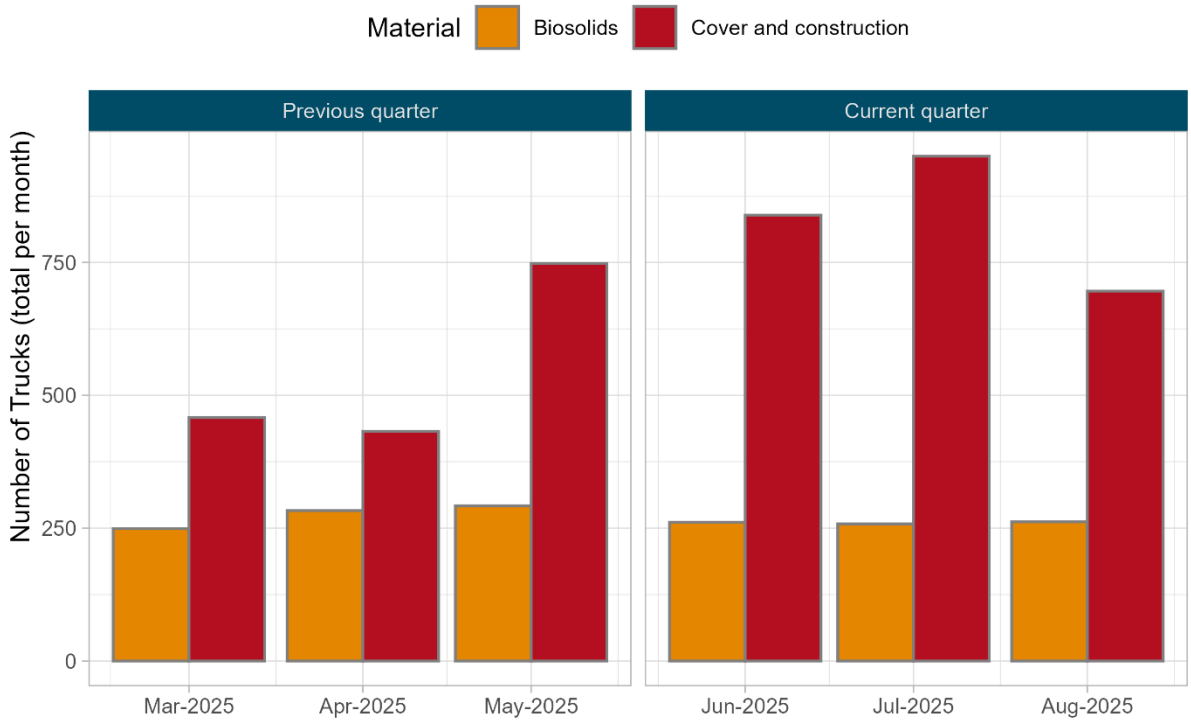


Figure 7-2: Monthly truck deliveries to Puketutu Biosolids Facility

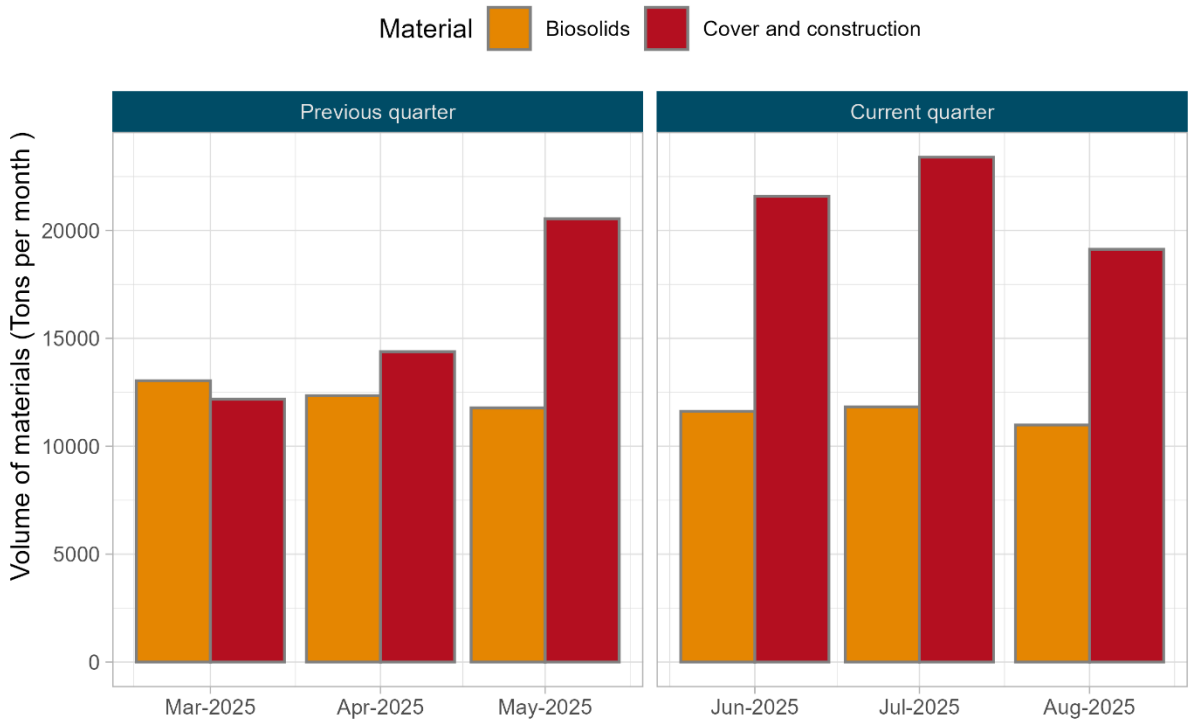


Figure 7-3: Monthly tonnages received at Puketutu Biosolids Facility