

Report Period

1/07/2026

1/09/2026

**Monitoring Summary
for Hodgson Quarries and Plant Pty Ltd
Roberts Road Sand Quarry, Maroota,
NSW**

Site Monitoring Locations



Groundwater Levels

Groundwater levels are currently monitored in nine boreholes located on the site. Groundwater levels are manually measured for depth each month using a groundwater dipper. Data is downloaded from groundwater loggers where present. MW1 logger was installed prior to 2015; the remaining loggers were installed in 2017.

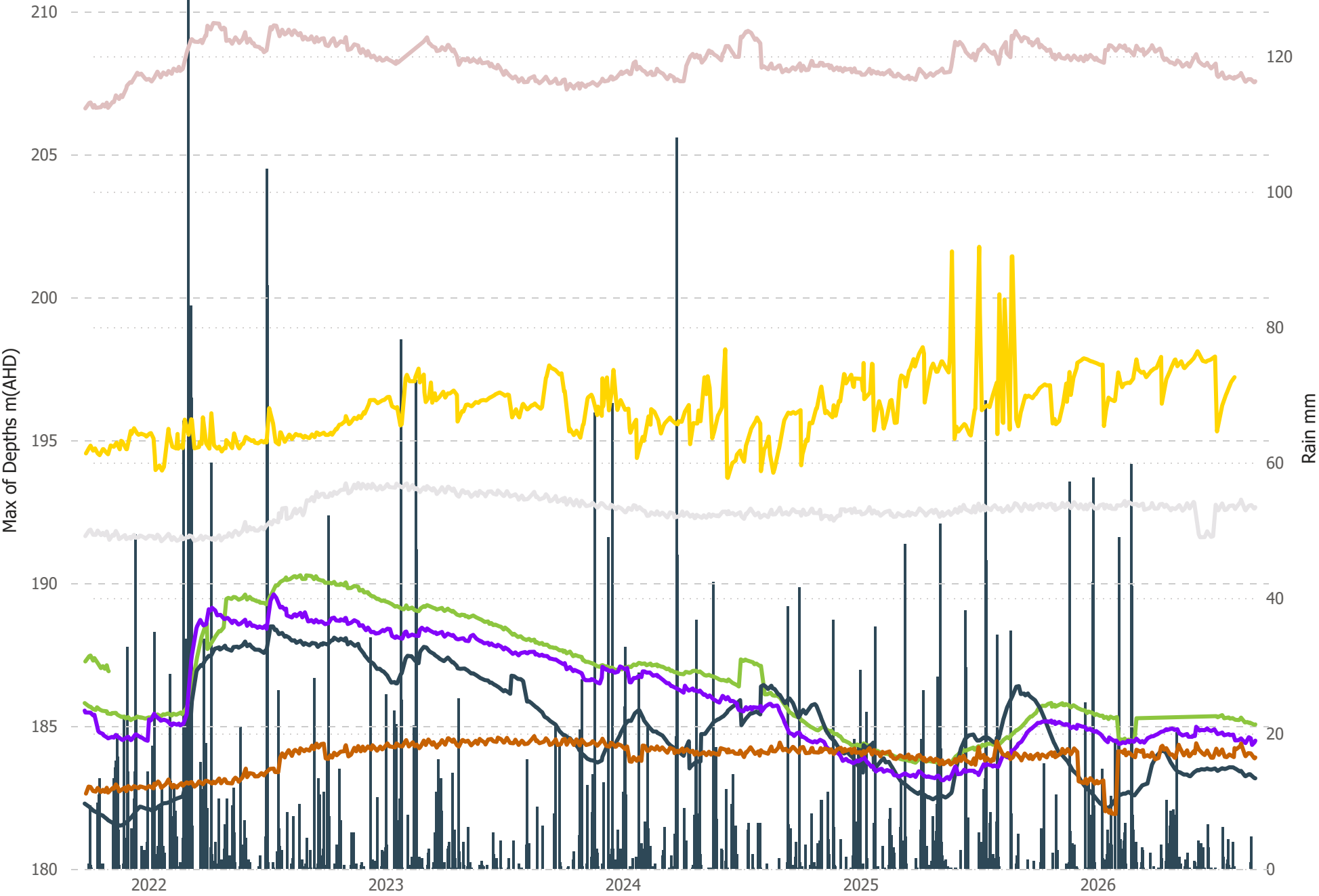
Graph 1 displays the depths as of January 2017. Graph 2 shows depths in the past month. Following anomalous readings from the MW5 logger, the bore was investigated and discovered to have collapsed. The logger was relocated to a functioning bore and the bore abandoned and replaced by nearby MW8.

MW1 and MW12 were taken away for repairs during April 2018 and returned in October 2018, hence the gap in reporting on the following graphs.

Due to rain gauge malfunctions, rainfall was not recorded in 2020 until a new weather station was installed onsite 29th May 2020. Where available, daily rainfall received in the interim was been sourced from the Bureau of Meteorology.

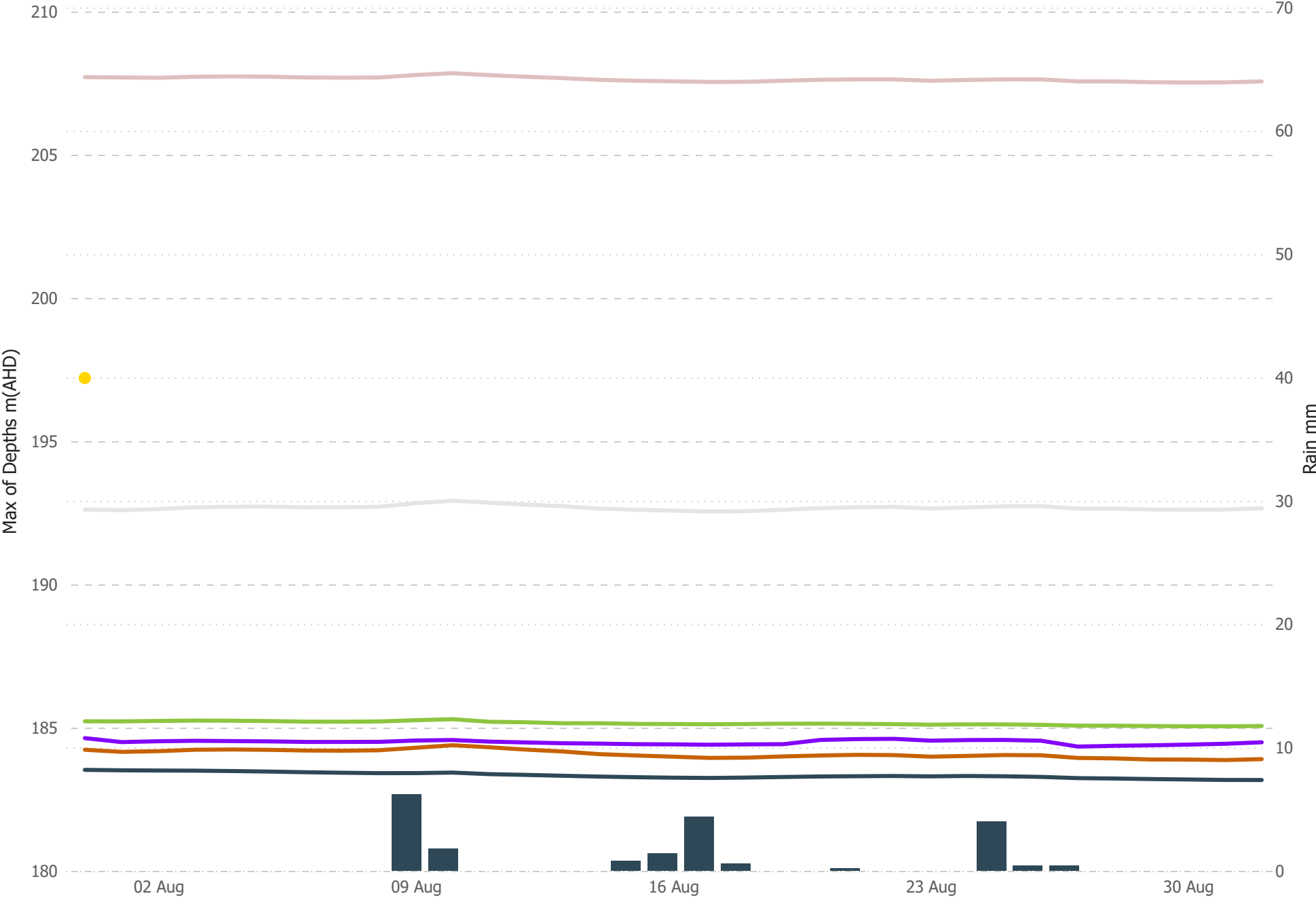
All Groundwater Depths with Rainfall

- Well ID**
- MW1
 - MW10
 - MW11 (Off Old Telegraph Rd)
 - MW12
 - MW6 (Office)
 - MW7
 - MW8
 - MW9



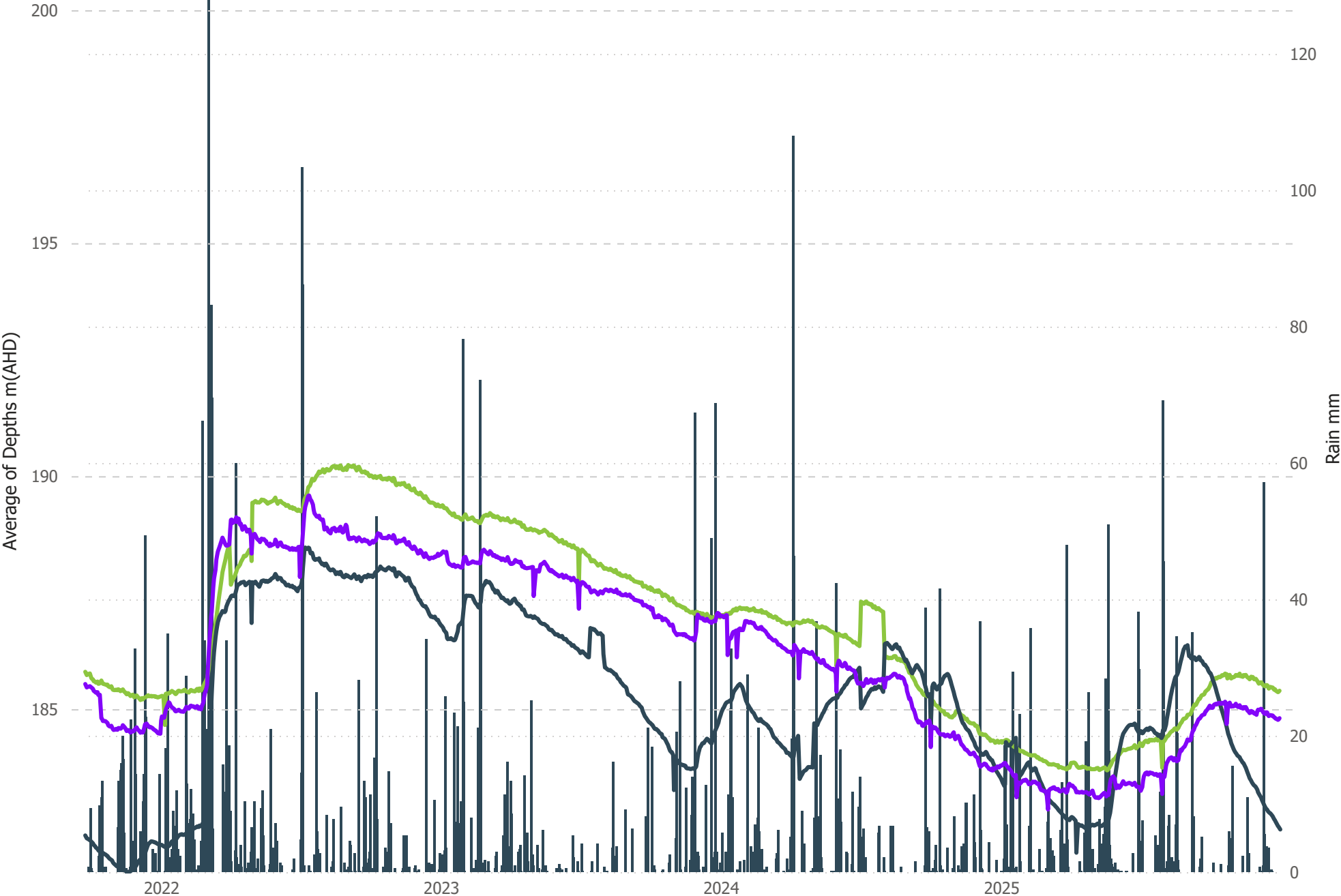
All Groundwater Depths with Rainfall for this Report Period

- Well ID**
- MW1
 - MW10
 - MW11 (Off Old Telegraph Rd)
 - MW12
 - MW6 (Office)
 - MW7
 - MW8



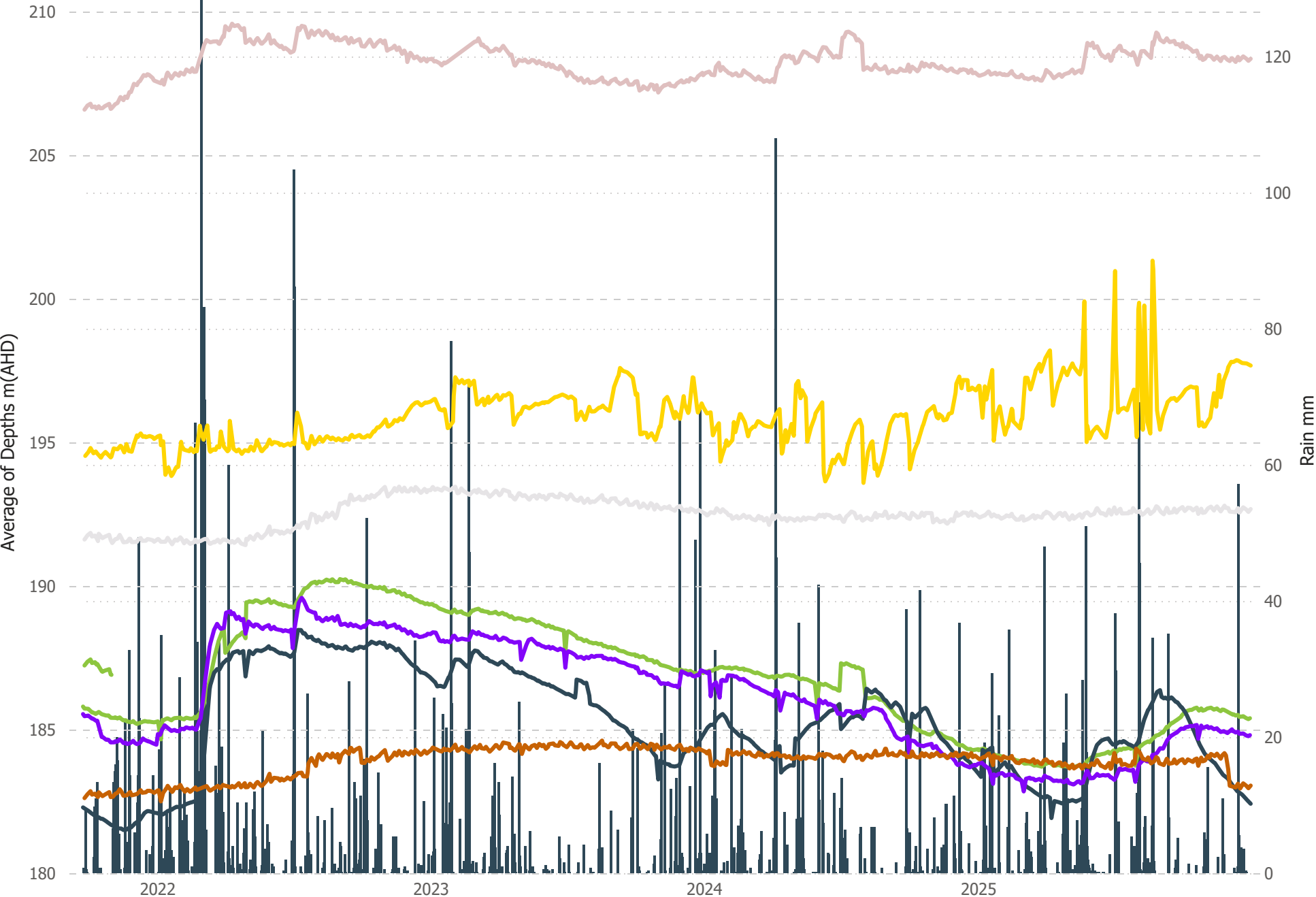
All Groundwater Depths with Rainfall

- Well ID**
- MW10
 - MW11 (Off Old Telegraph Rd)
 - MW6 (Office)



All Groundwater Depths with Rainfall in Hawkesbury Sandstone

- Well ID**
- MW1
 - MW10
 - MW11 (Off Old Telegraph Rd)
 - MW12
 - MW6 (Office)
 - MW7
 - MW8
 - MW9



Weather Station Monitoring

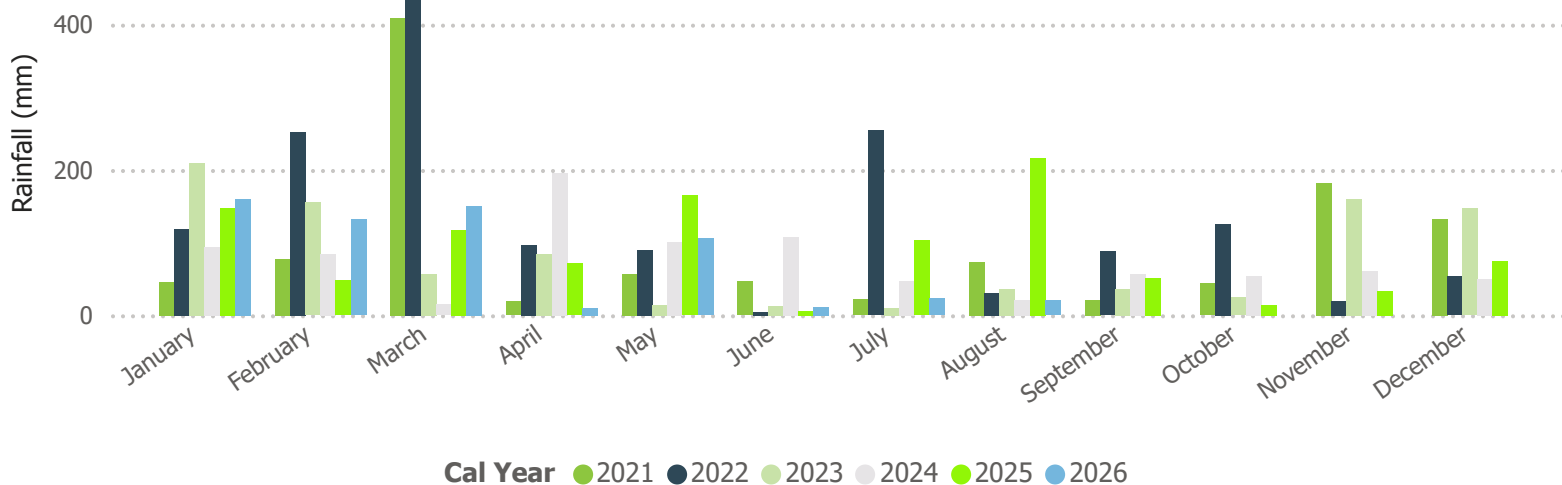
Due to gauge malfunctions, rainfall was not recorded in 2020 until a new weather station was installed onsite 29th May 2020. Where available, daily rainfall received in the interim was been sourced from the Bureau of Meteorology. Temperature monitoring during that period also shows gaps in the data. For modelling and reporting, Bureau of Meteorology averages were used

Weather Trends

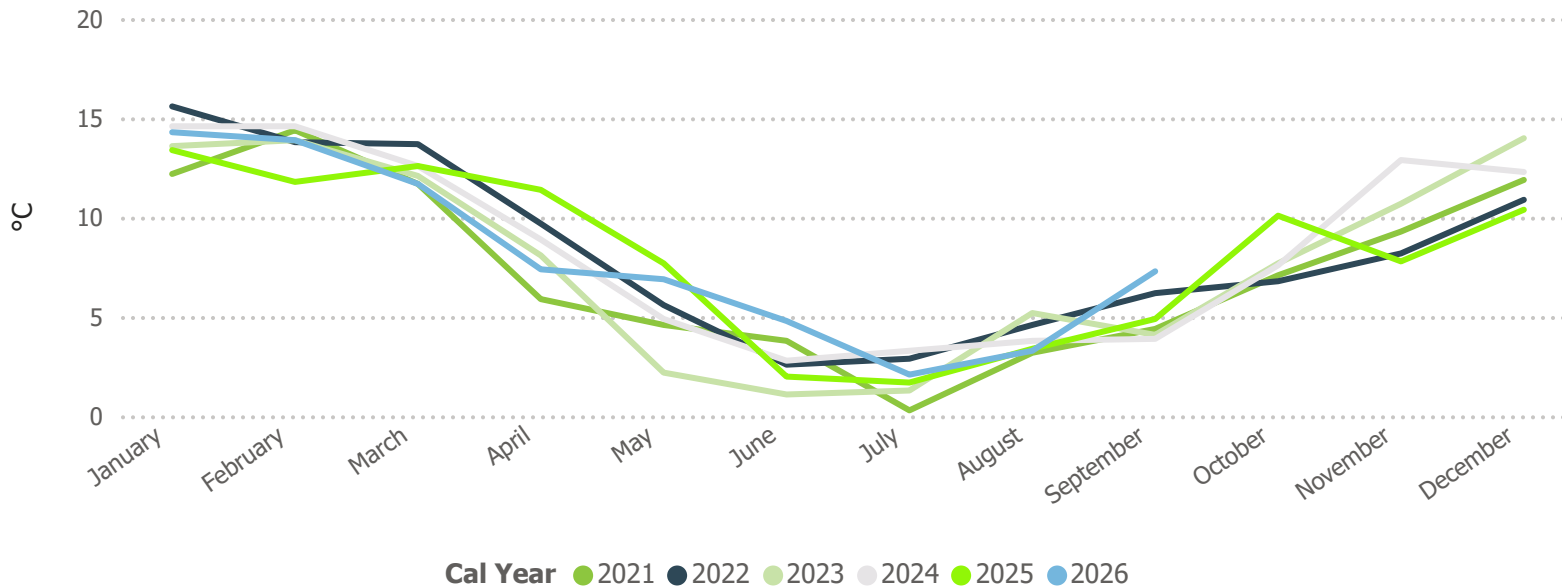
1/01/2021

1/09/2026

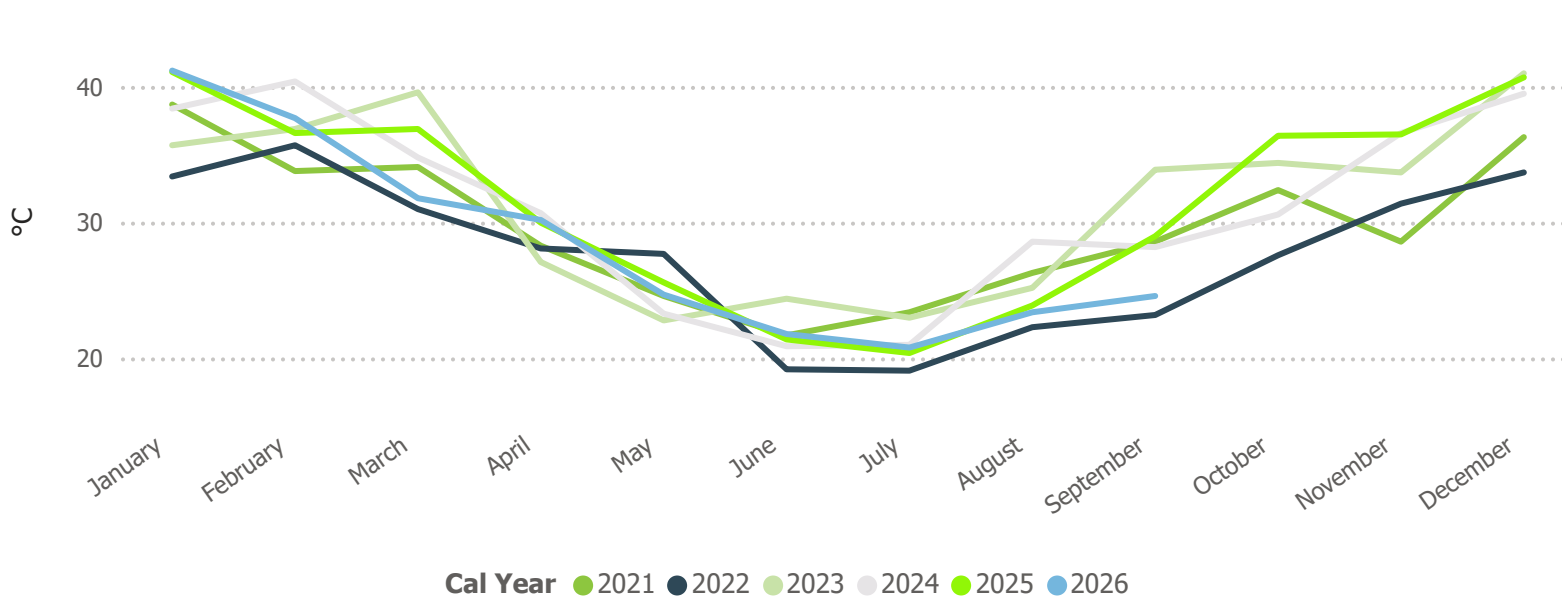
Precipitation



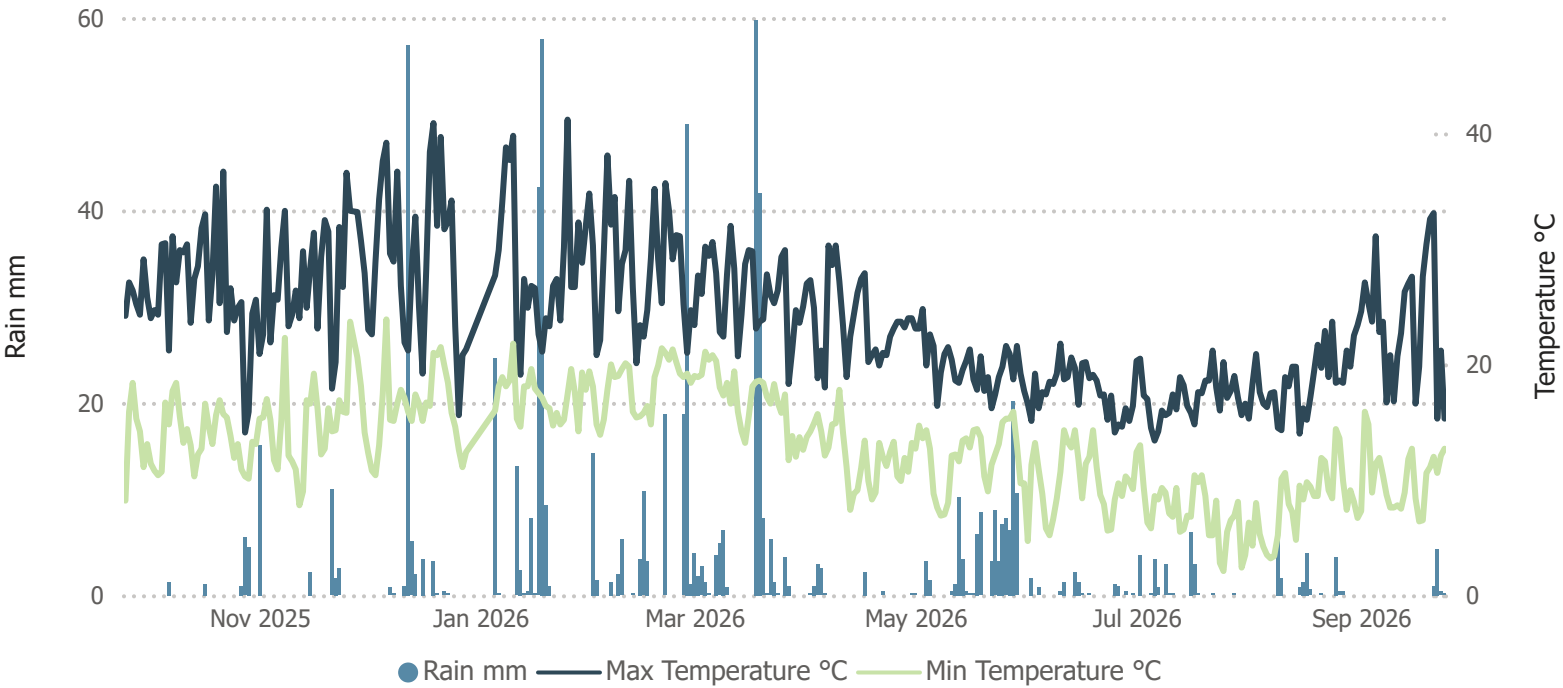
Minimum Temperature



Maximum Temperature



Weather Detail in Report Period



Precipitation mm

Year	January	February	March	April	May	June	July	August	September	October	November	December
2022	119.0	252.0	477.6	96.4	89.8	5.0	254.2	30.4	87.8	125.6	19.6	53.4
2023	210.0	155.2	57.0	84.2	13.8	12.8	10.4	36.4	35.8	24.4	160.2	146.8
2024	94.4	84.2	15.0	196.2	101.2	107.4	47.0	21.0	56.8	54.0	60.6	50.2
2025	147.8	48.0	117.8	71.4	165.0	5.8	103.0	216.4	51.4	14.6	33.6	75.2
2026	160.2	132.0	150.4	10.4	105.8	11.4	23.0	20.2	6.4			

Minimum Temperature °C

Year	January	February	March	April	May	June	July	August	September	October	November	December
2022	15.6	13.8	13.7	9.7	5.6	2.6	2.9	4.6	6.2	6.8	8.2	10.9
2023	13.6	13.9	12.1	8.1	2.2	1.1	1.3	5.2	4.1	7.7	10.7	14.0
2024	14.6	14.6	12.6	8.9	4.9	2.8	3.3	3.8	3.9	7.6	12.9	12.3
2025	13.4	11.8	12.6	11.4	7.7	2.0	1.7	3.4	4.9	10.1	7.8	10.4
2026	14.3	13.9	11.7	7.4	6.9	4.8	2.1	3.3	6.4			

Average Temperature °C

Year	January	February	March	April	May	June	July	August	September	October	November	December
2022	22.1	20.6	19.7	17.3	14.3	10.8	10.8	12.7	14.0	16.7	17.7	19.1
2023	21.0	22.1	21.6	16.5	12.6	11.7	12.4	13.1	16.6	18.1	19.4	22.4
2024	22.8	22.4	20.9	17.3	13.9	11.2	11.1	14.6	16.0	17.0	20.7	22.8
2025	21.5	22.1	21.3	18.3	14.8	10.8	11.1	12.0	16.3	19.5	20.3	21.9
2026	22.3	22.3	20.6	17.3	15.4	13.2	11.7	12.8	16.4			

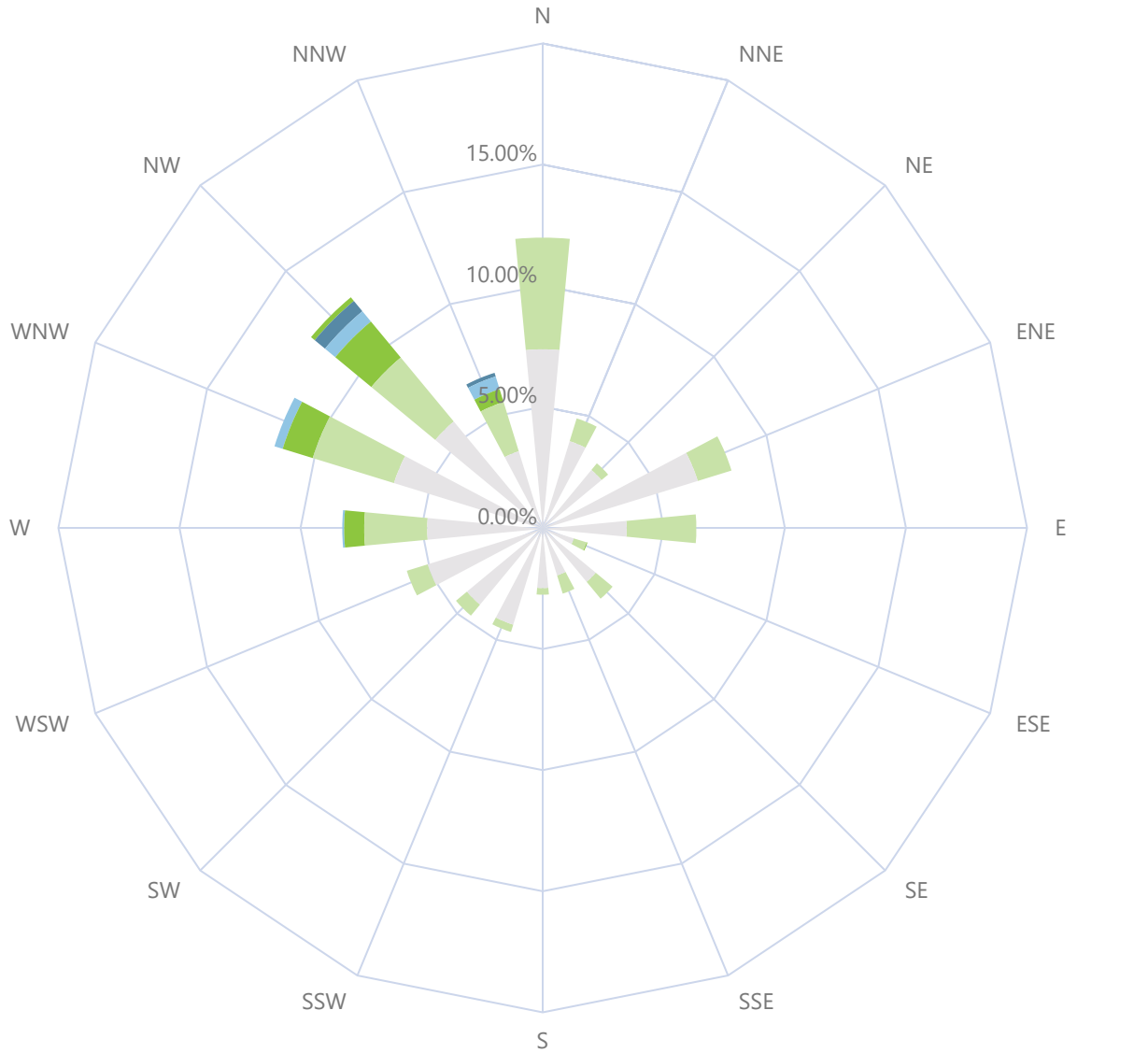
Maximum Temperature °C

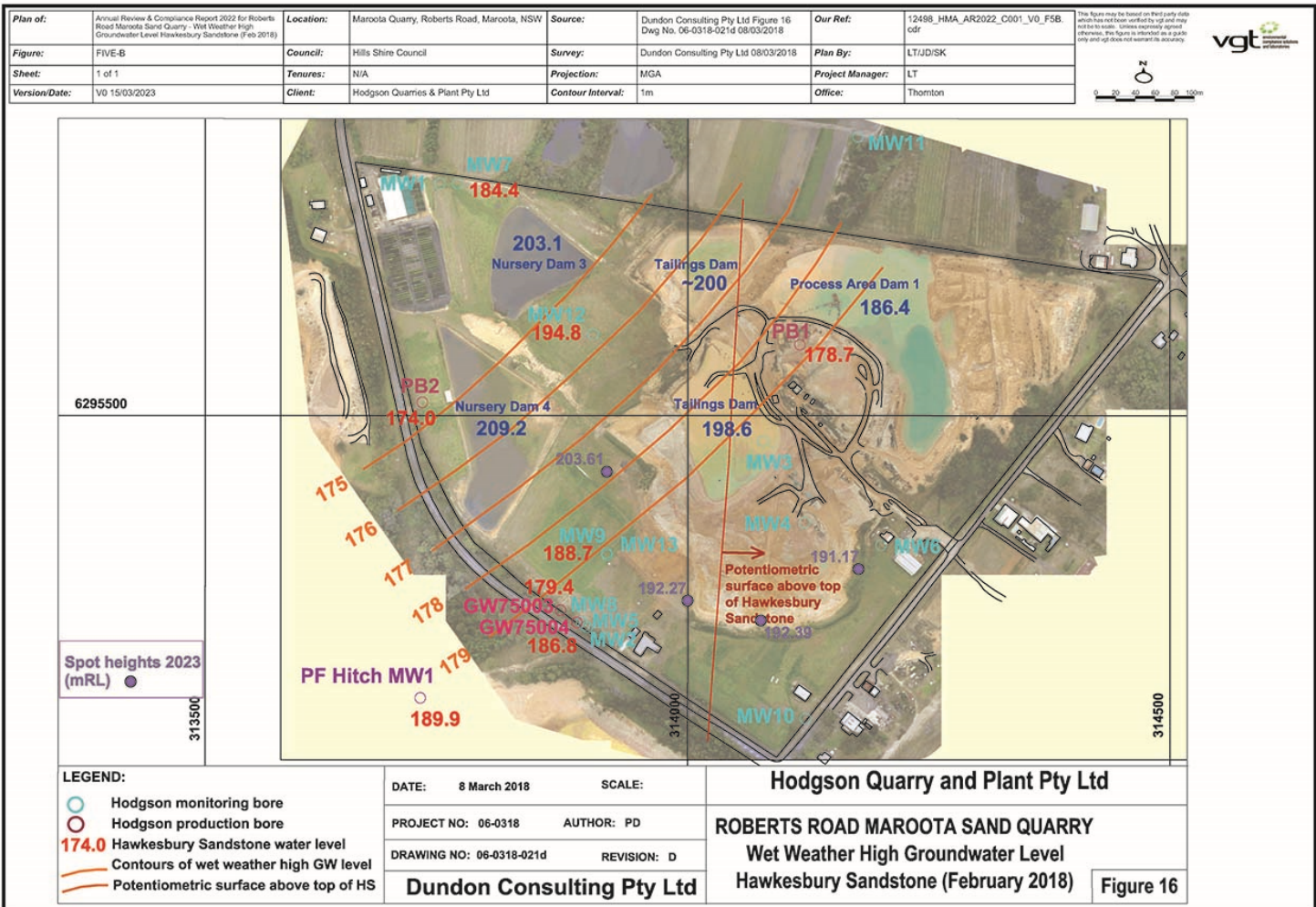
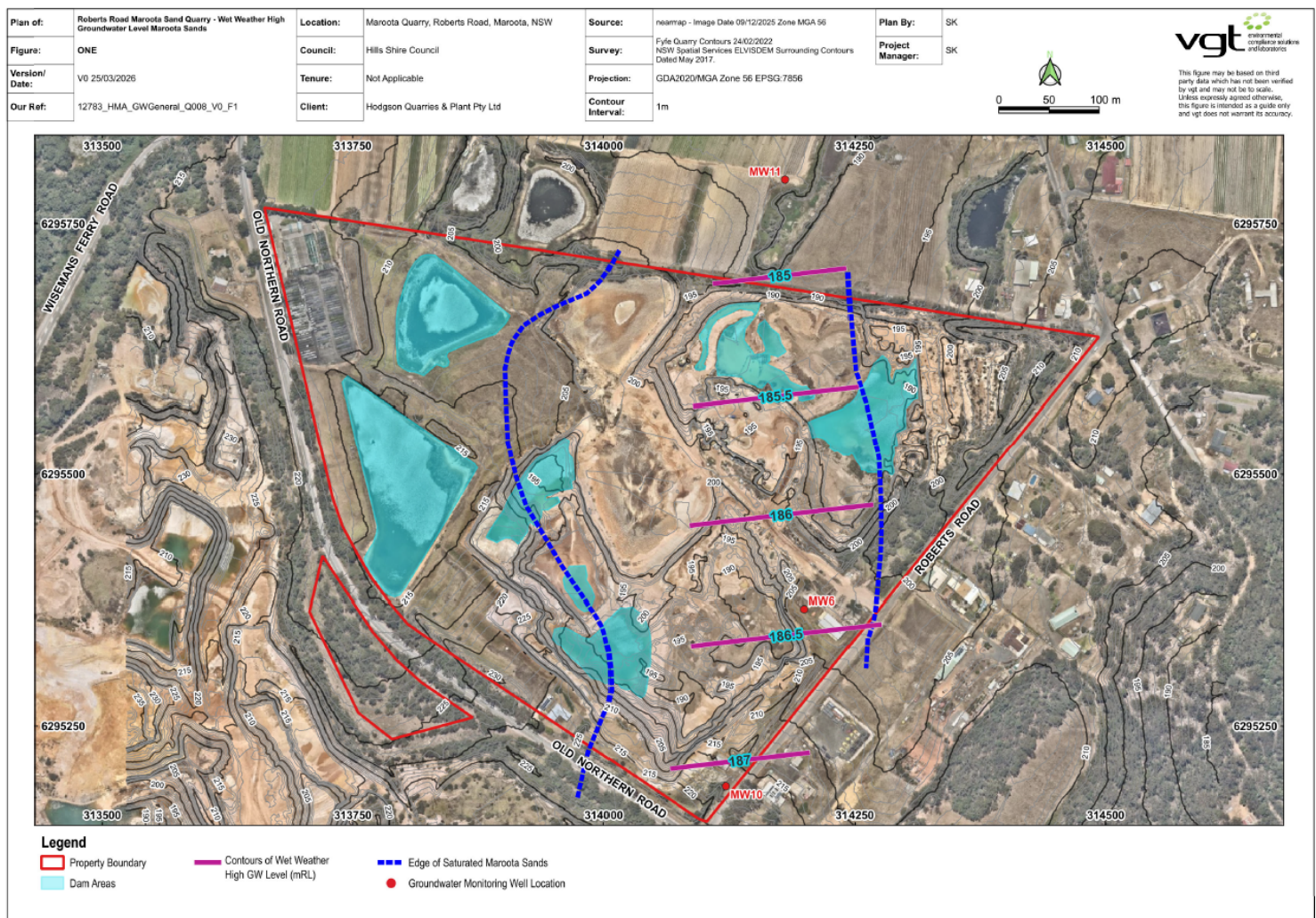
Year	January	February	March	April	May	June	July	August	September	October	November	December
2022	33.4	35.7	31.0	28.1	27.7	19.2	19.1	22.3	23.2	27.6	31.4	33.7
2023	35.7	36.9	39.6	27.1	22.8	24.4	23.0	25.2	33.9	34.4	33.7	41.0
2024	38.4	40.4	34.8	30.7	23.3	20.9	21.0	28.6	28.2	30.6	36.6	39.5
2025	41.1	36.6	36.9	30.0	25.6	21.4	20.4	23.9	29.0	36.4	36.5	40.7
2026	41.2	37.7	31.8	30.2	24.7	21.8	20.8	23.4	32.8			

Wind Rose for Report Period

Wind Speed Groups

> 0-5 km/h	> 5-10 km/h	> 10-15 km/h	> 15-20 km/h	> 20-25 Km/h	> 25-30 Km/h	> 30+ Km/h
------------	-------------	--------------	--------------	--------------	--------------	------------

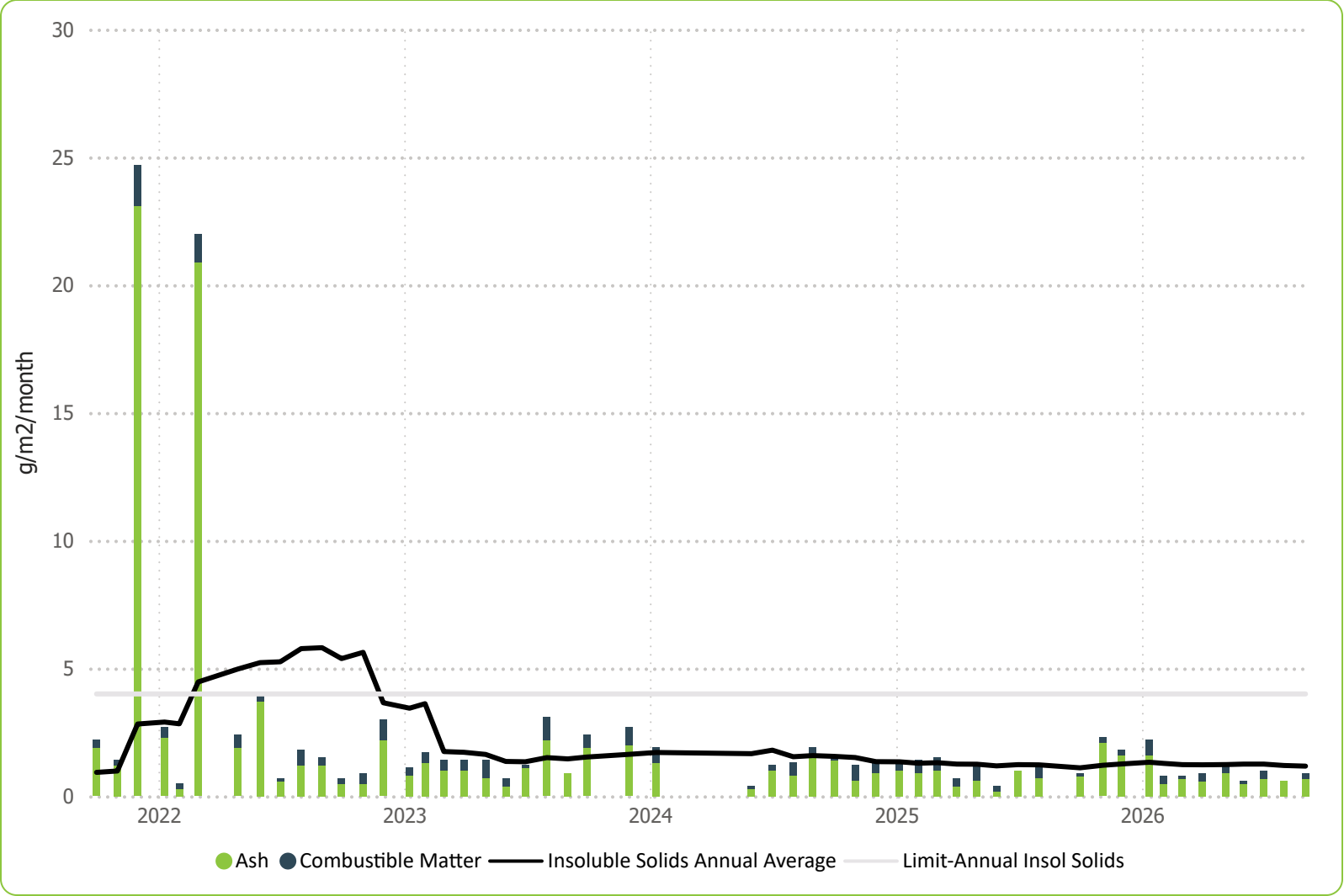




Depositional Dust and Particulate Matter Monitoring

Depositional Dusts

Insoluble Solids
Annual Average
g/m2/month

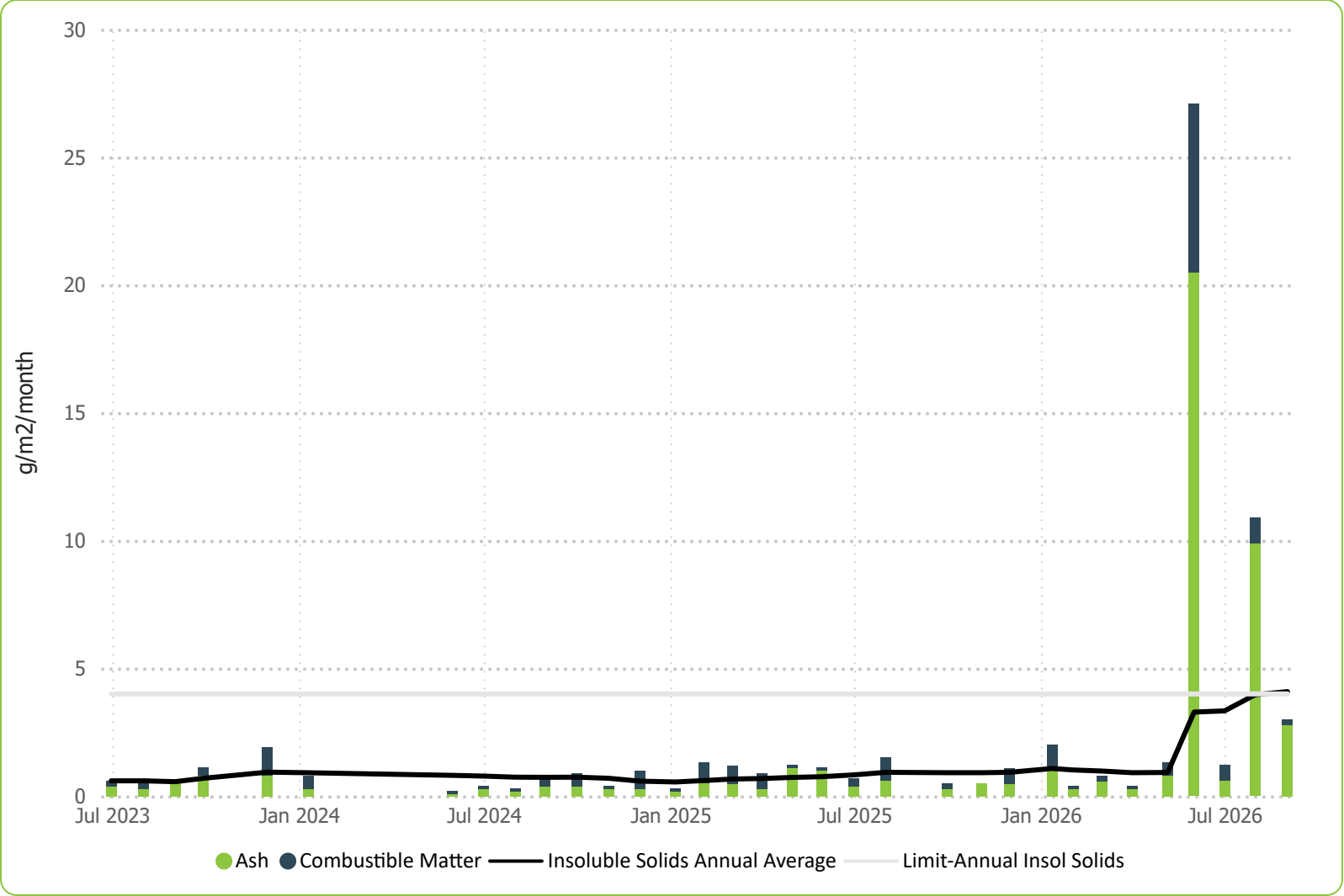
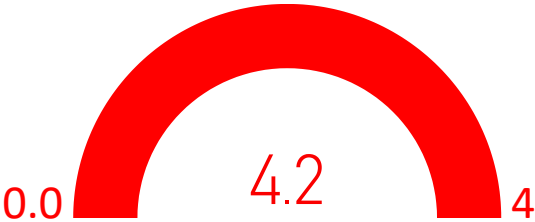


Date & Time On	Comments	Date Sampled	Days On	Insoluble Solids	Ash	Combustible Matter	Calculated Rain
2/09/2025		1/10/2025	29	0.9	0.8	0.1	49
1/10/2025		4/11/2025	28	2.3	2.1	0.2	30
4/11/2025		1/12/2025	27	1.8	1.6	0.2	23
1/12/2025		12/01/2026	28	2.2	1.6	0.6	115
12/01/2026		2/02/2026	28	0.8	0.5	0.3	115
2/02/2026		2/03/2026	28	0.8	0.7	0.1	30
2/03/2026		1/04/2026	30	0.9	0.6	0.3	115
1/04/2026		6/05/2026	35	1.3	0.9	0.4	23
6/05/2026		1/06/2026	26	0.6	0.5	0.1	106
1/06/2026		1/07/2026	30	1.0	0.7	0.3	28
1/07/2026		31/07/2026	30	0.6	0.6	0.0	23
31/07/2026		1/09/2026	32	0.9	0.7	0.2	28

Depositional Dusts

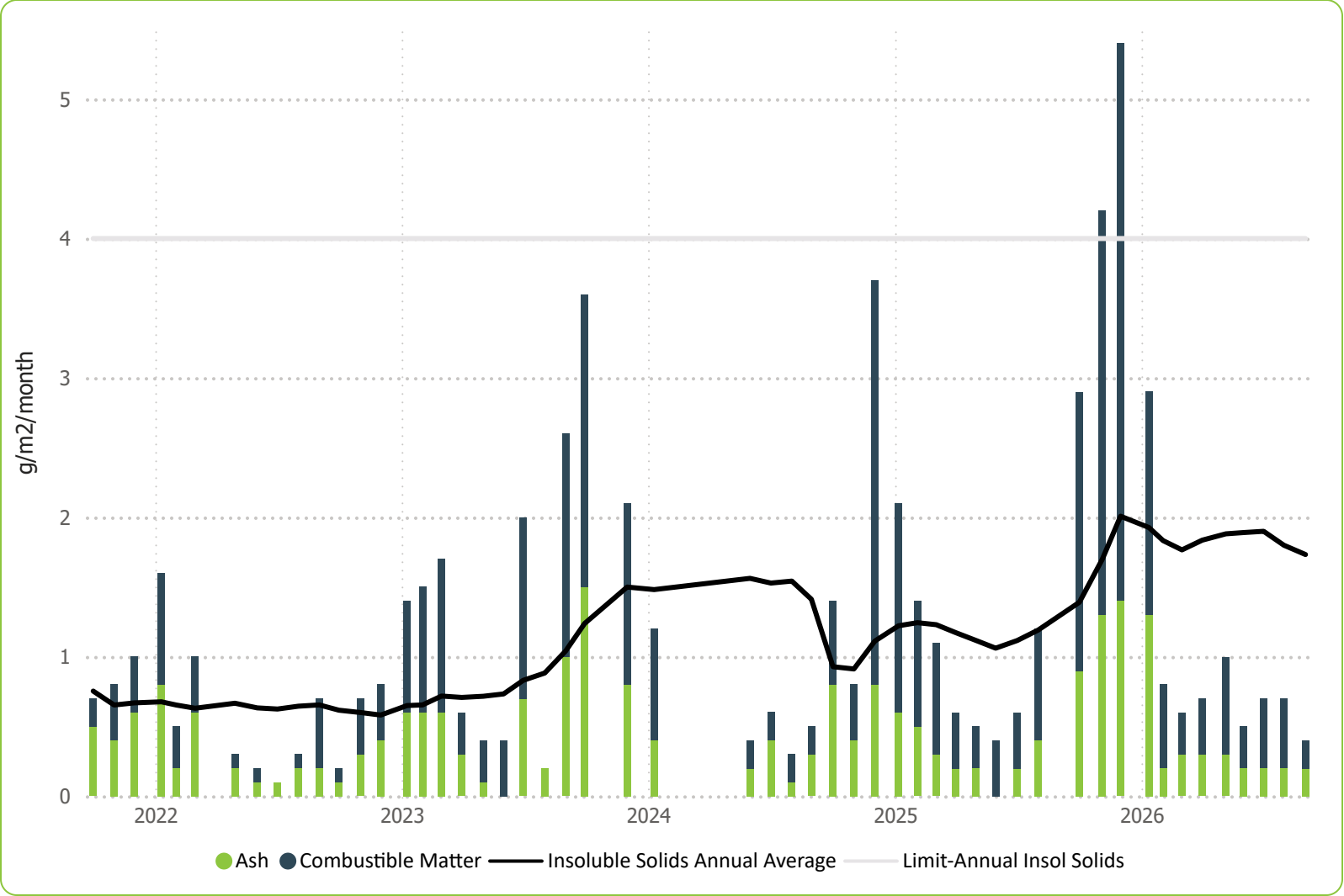
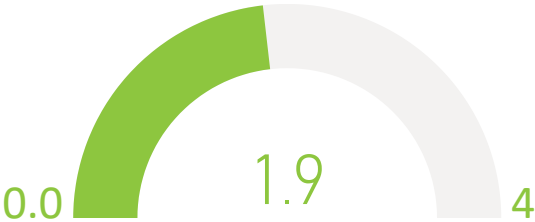
D2a North East Corner

Insoluble Solids
Annual Average
g/m2/month



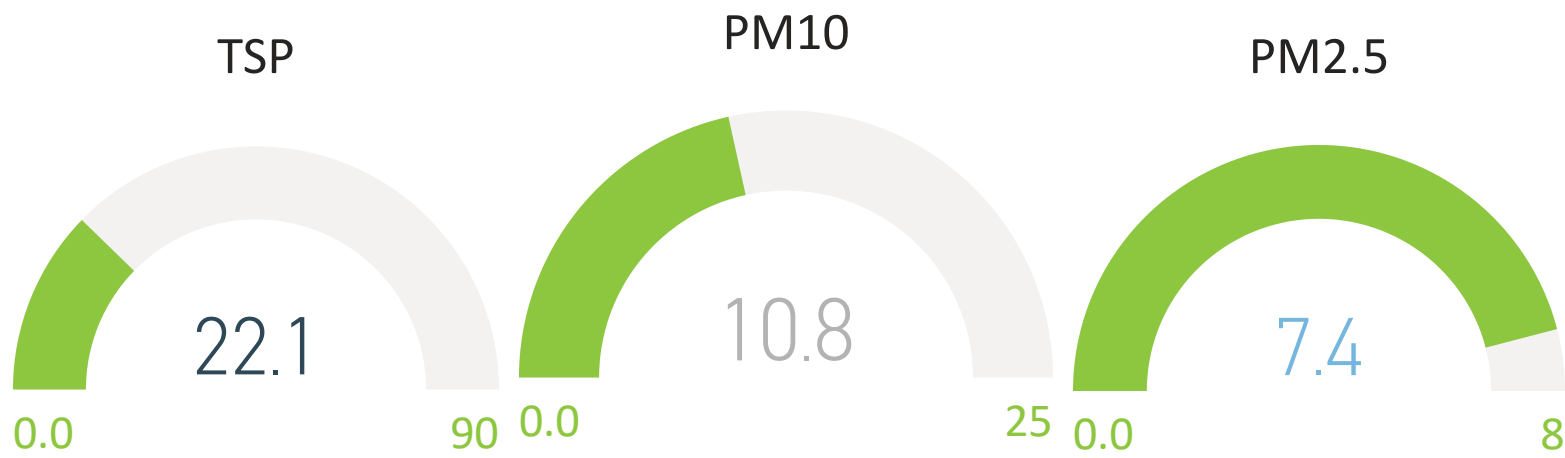
Date & Time On	Comments	Date Sampled	Days On	Insoluble Solids	Ash	Combustible Matter	Calculated Rain
2/09/2025		1/10/2025	29	0.5	0.3	0.2	42
1/10/2025		4/11/2025	28	0.4	0.5	0.0	26
4/11/2025		1/12/2025	27	1.1	0.5	0.6	11
1/12/2025		12/01/2026	28	2.0	1.0	1.0	115
12/01/2026		2/02/2026	28	0.4	0.3	0.1	114
2/02/2026		2/03/2026	28	0.8	0.6	0.2	114
2/03/2026		1/04/2026	30	0.4	0.3	0.1	114
1/04/2026		6/05/2026	35	1.3	0.8	0.5	10
6/05/2026		1/06/2026	26	27.1	20.5	6.6	108
1/06/2026		1/07/2026	30	1.2	0.6	0.6	26
1/07/2026		31/07/2026	30	10.9	9.9	1.0	19
31/07/2026		1/09/2026	32	3.0	2.8	0.2	19

Insoluble Solids
Annual Average
g/m2/month

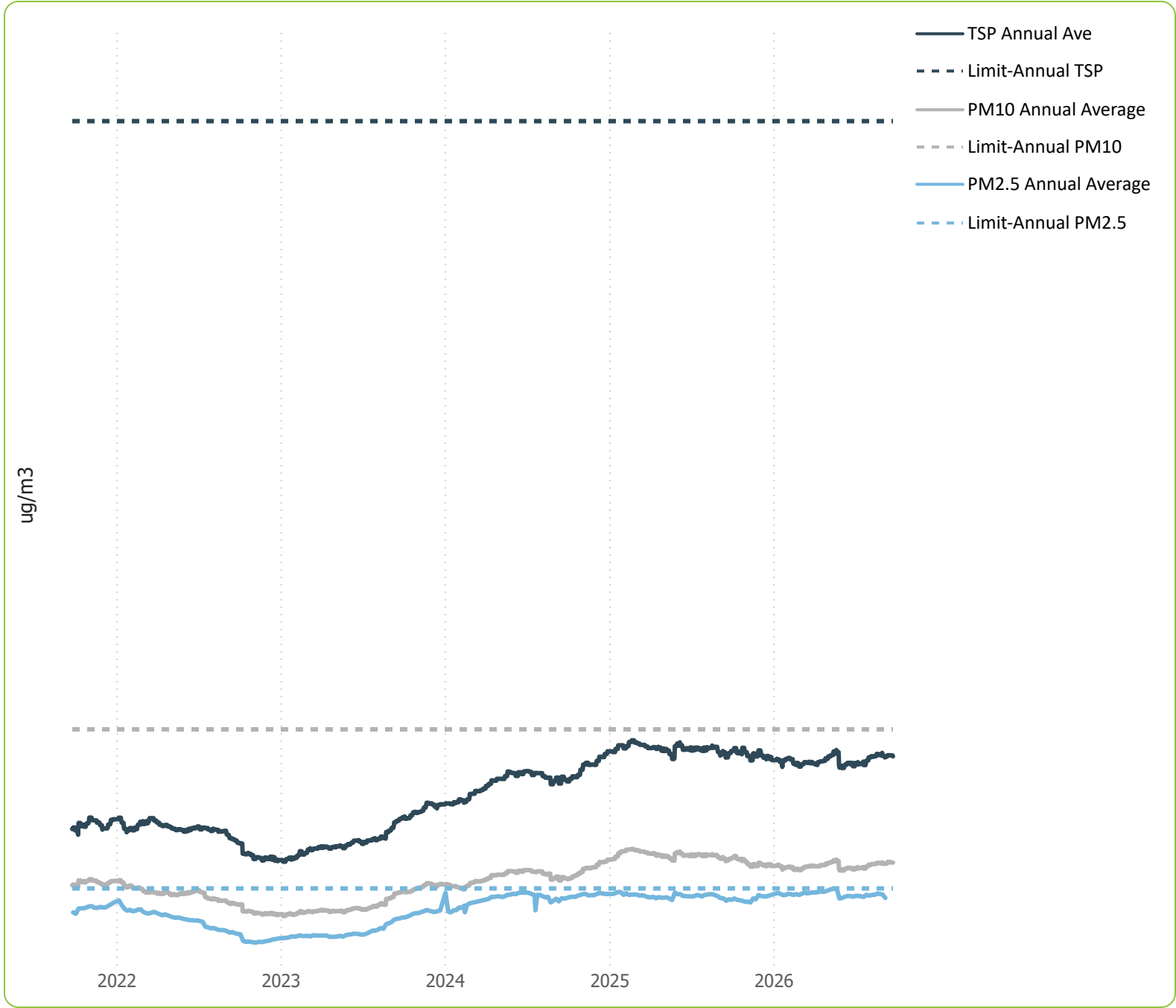


Date & Time On	Comments	Date Sampled	Days On	Insoluble Solids	Ash	Combustibl e Matter	Calculated Rain
2/09/2025		1/10/2025	29	2.9	0.9	2.0	51
1/10/2025		4/11/2025	28	4.2	1.3	2.9	32
4/11/2025		1/12/2025	27	5.4	1.4	4.0	22
1/12/2025		12/01/2026	28	2.9	1.3	1.6	110
12/01/2026		2/02/2026	28	0.8	0.2	0.6	115
2/02/2026		2/03/2026	28	0.6	0.3	0.3	115
2/03/2026		1/04/2026	30	0.7	0.3	0.4	110
1/04/2026		6/05/2026	35	1.0	0.3	0.7	19
6/05/2026		1/06/2026	26	0.5	0.2	0.3	98
1/06/2026		1/07/2026	30	0.7	0.2	0.5	18
1/07/2026		31/07/2026	30	0.7	0.2	0.5	21
31/07/2026		1/09/2026	32	0.4	0.2	0.2	0

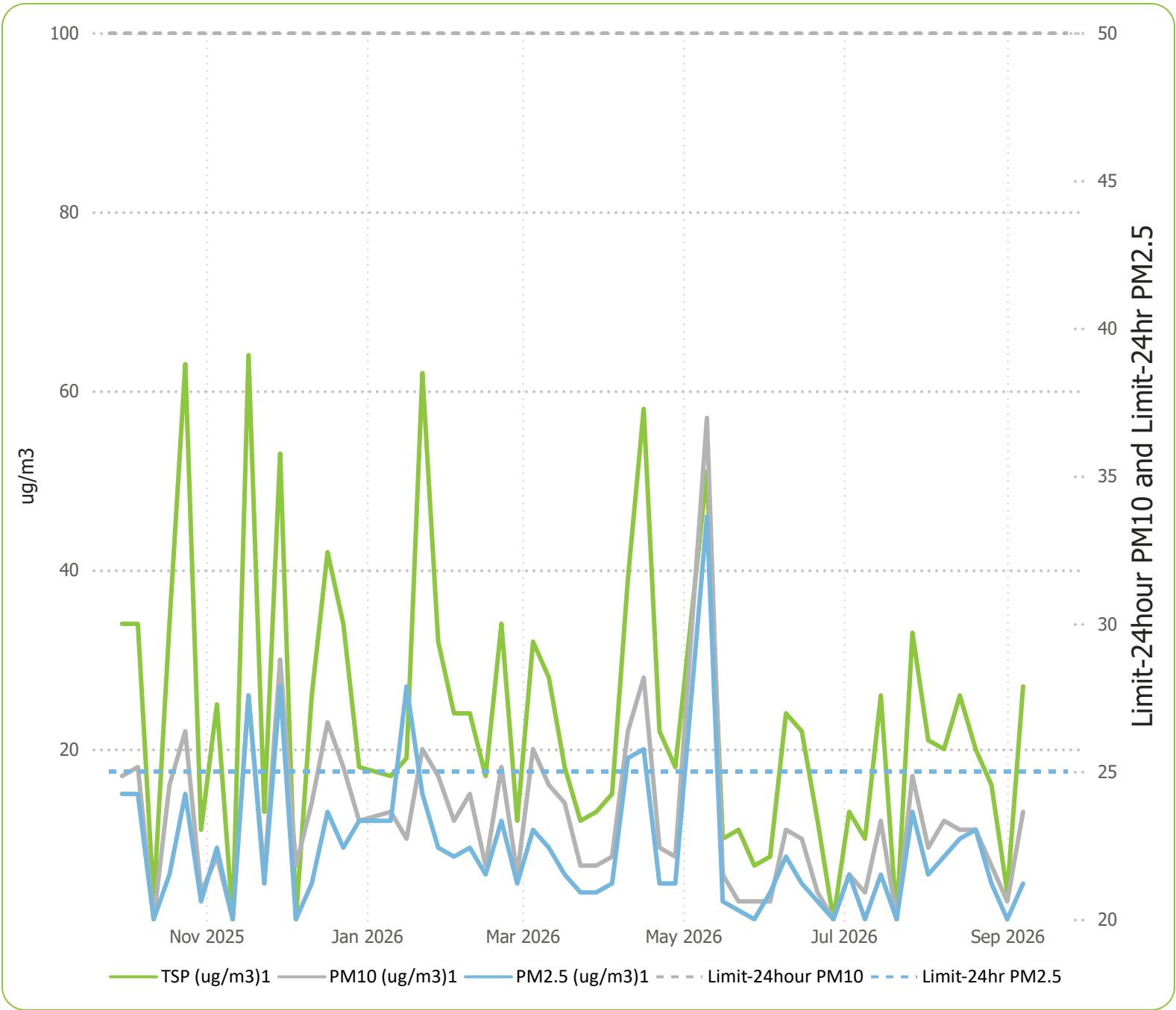
Particulate Matter Annual Averages (µg/m3)



HVAS annual averages calculated excluding extraordinary events



Particulate Matter 24 Hour Averages (µg/m3)



Cal Year	Max of TSP (ug/m3)1	Max of PM10 (ug/m3)1	Max of PM2.5 (ug/m3)1
2025	64.00	30.00	27.00

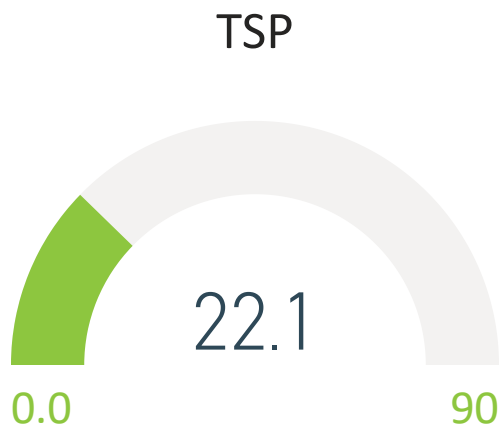
PM10 24 hour exceedances (>50 µg/m3)

Date	PM10 (ug/m3)1	Sampling Comments
10/05/26	57.00	Back burning

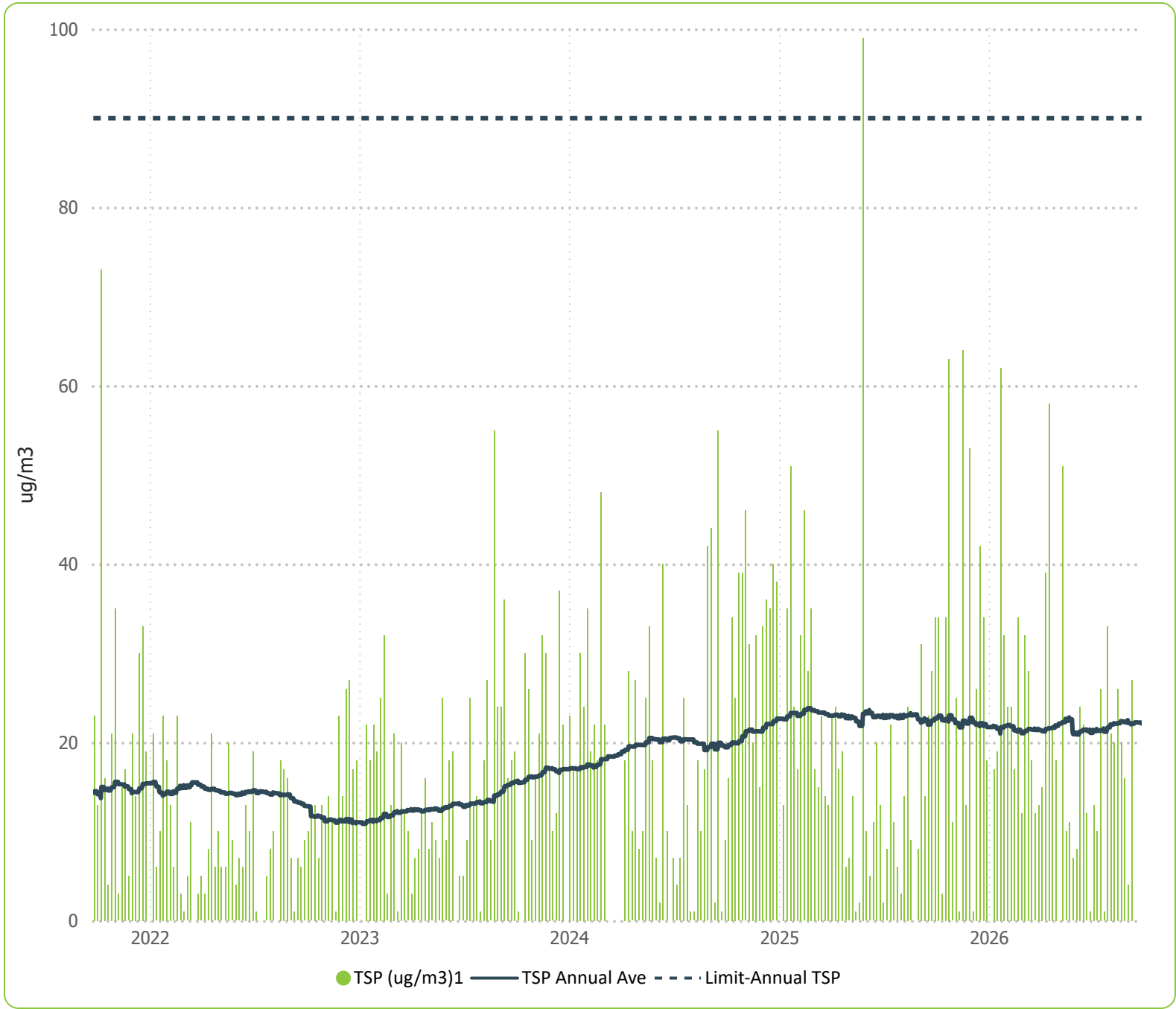
PM2.5 24 hour exceedances (>25 µg/m3)

Date	PM2.5 (ug/m3)1	Sampling Comments
17/11/25	26.00	
29/11/25	27.00	
16/01/26	27.00	Paper got wet and dirt spilt on it
10/05/26	46.00	Back burning

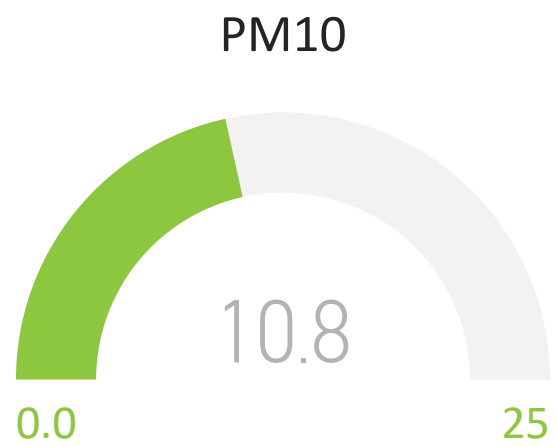
Particulate Matter Annual Averages (µg/m3)



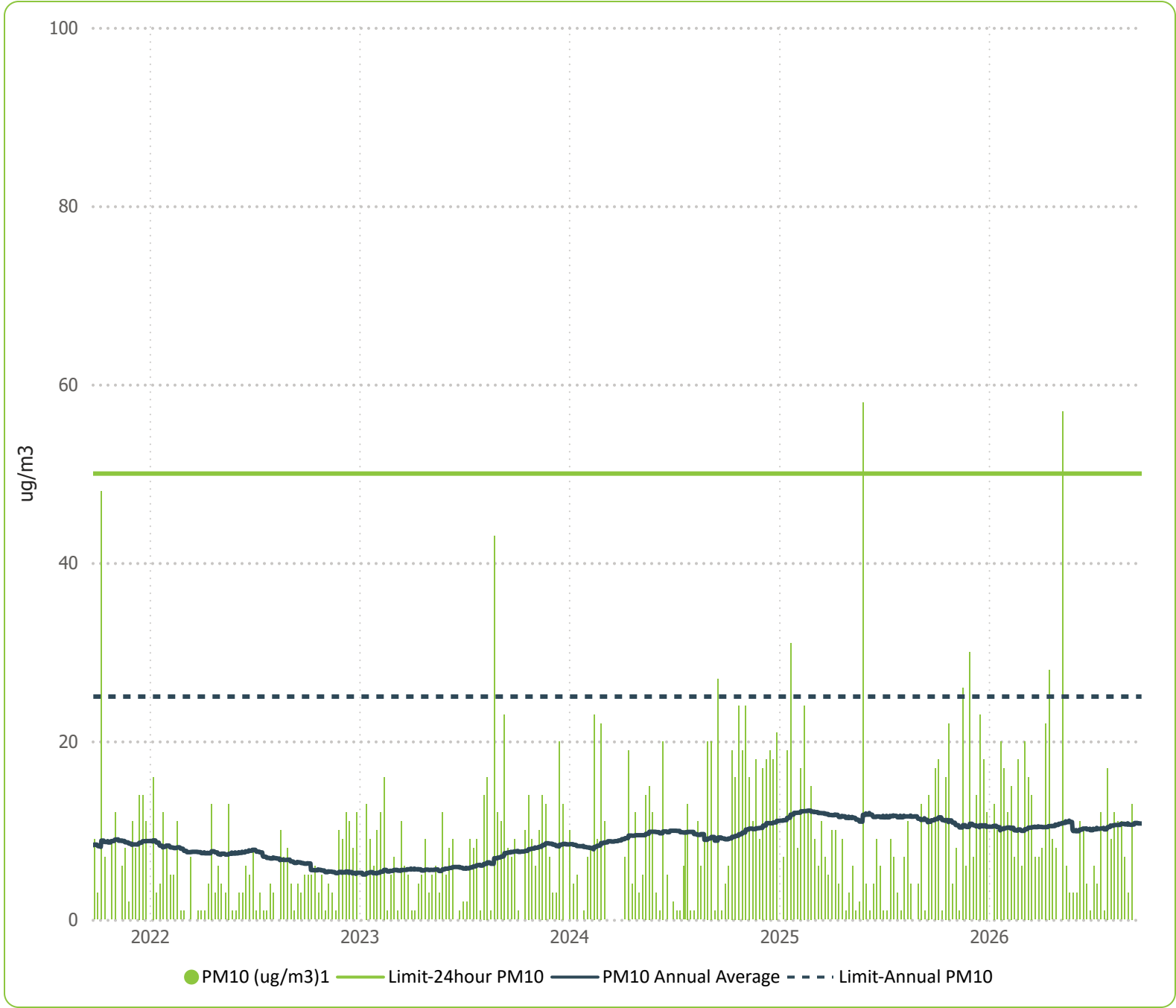
HVAS annual averages calculated excluding extraordinary events



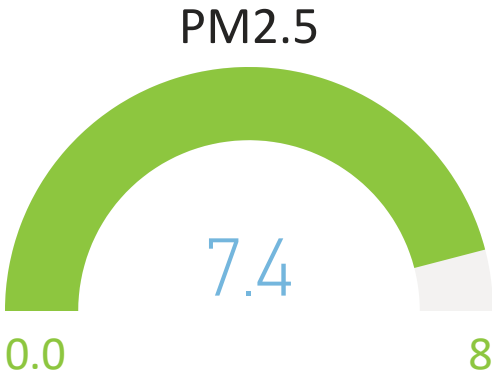
Particulate Matter Annual Averages (µg/m3)



HVAS annual averages calculated excluding extraordinary events



Particulate Matter Annual Averages (µg/m3)



HVAS annual averages calculated excluding extraordinary events

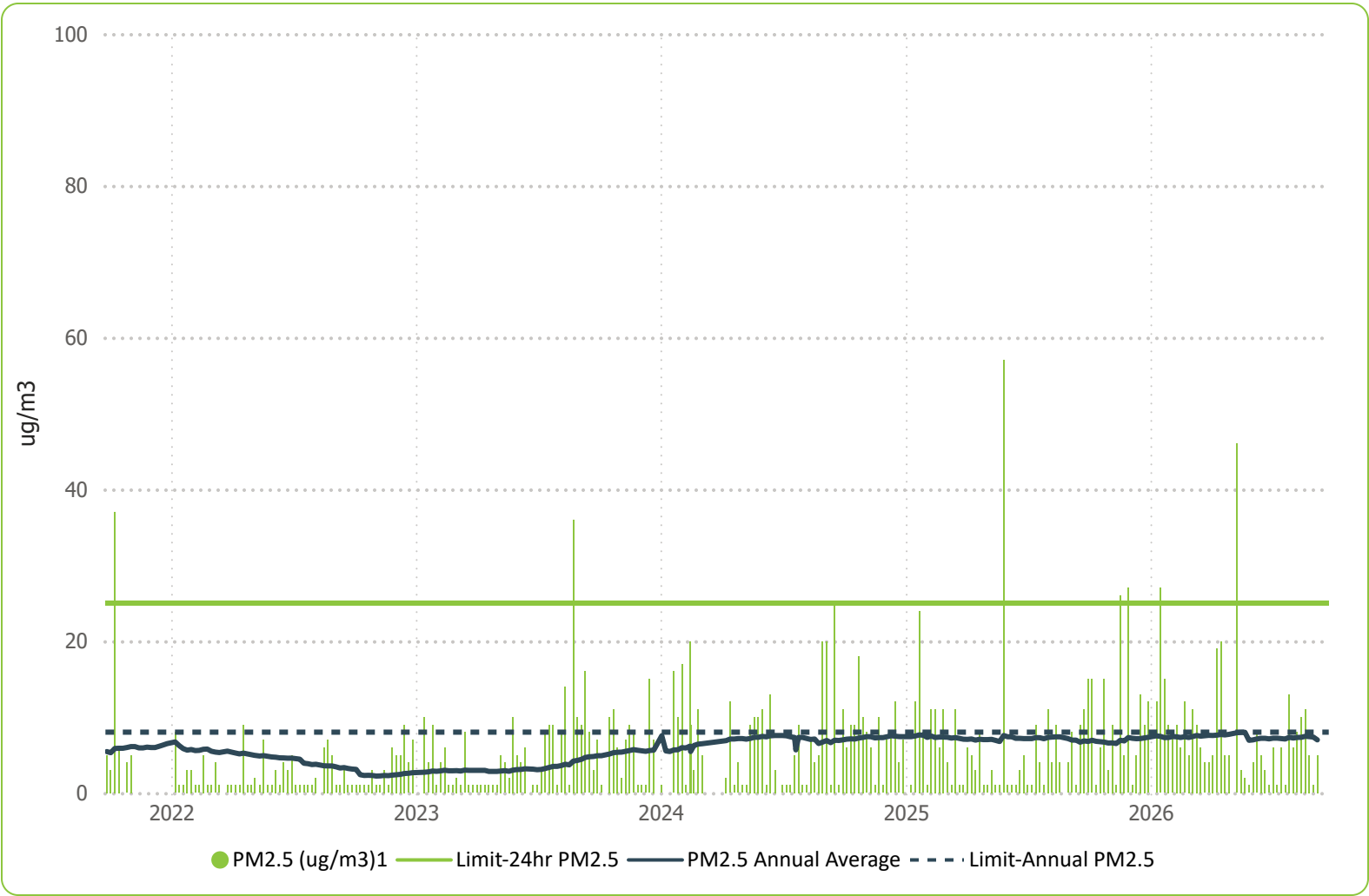
Samples >8ug/m3

Date	Sampling Comments	PM2.5 (ug/m3)
27/07/26		13.00
8/08/26		8.00
14/08/26		10.00
20/08/26		11.00

Date

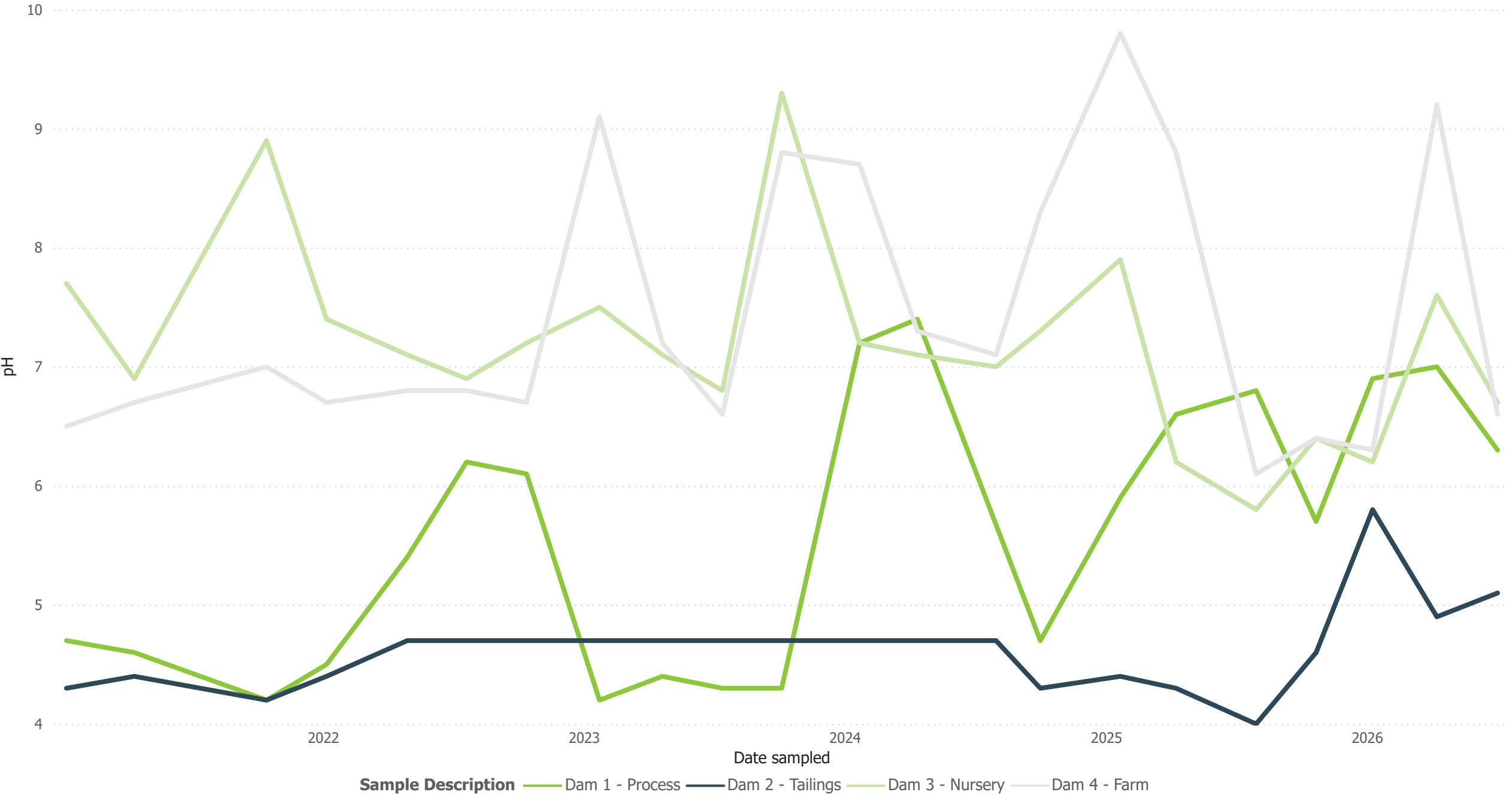
*Results from extraordinary events are not included in the annual average calculation

Extraordinary Event - PM2.5*

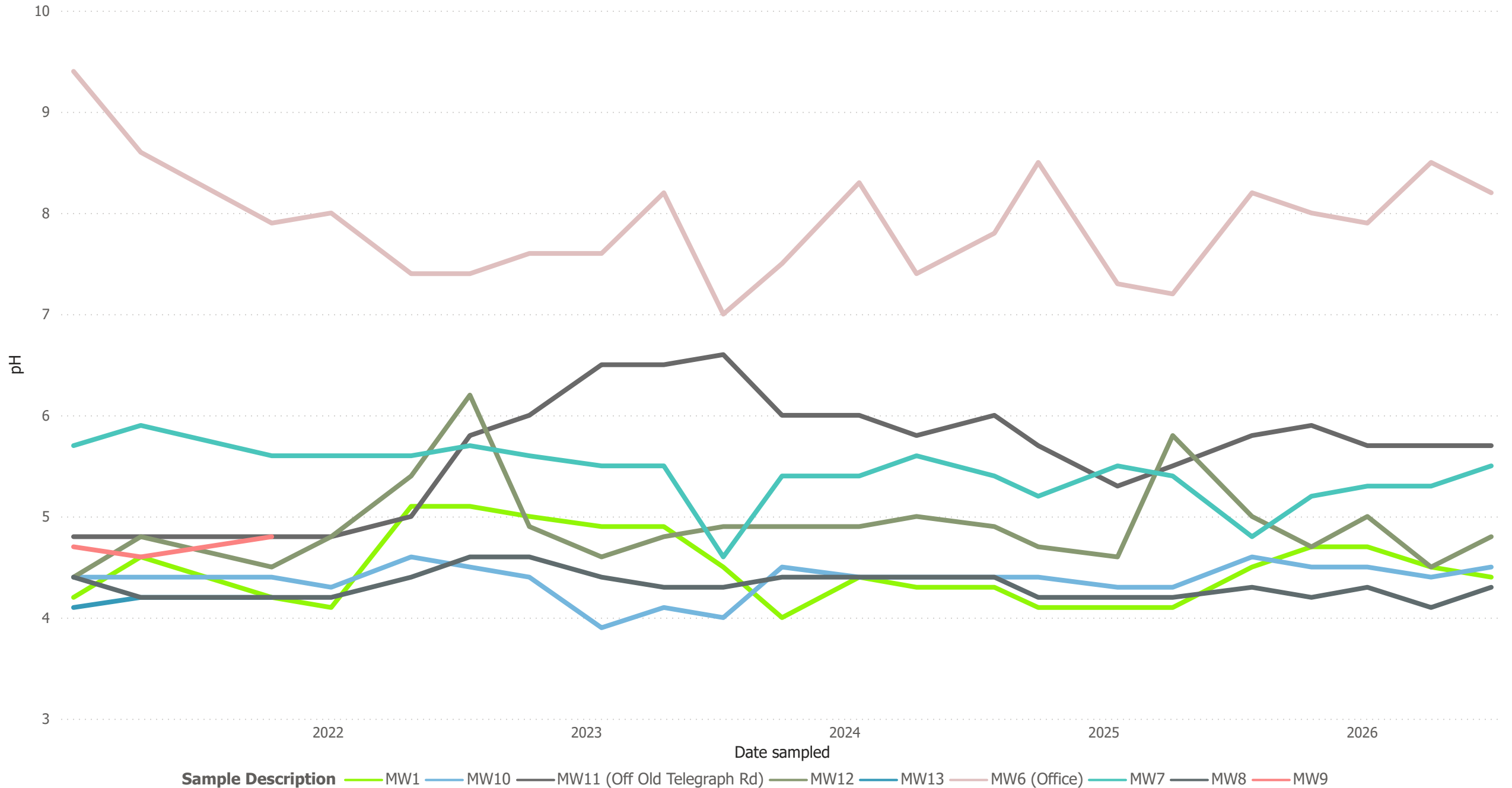


Water Quality Trends

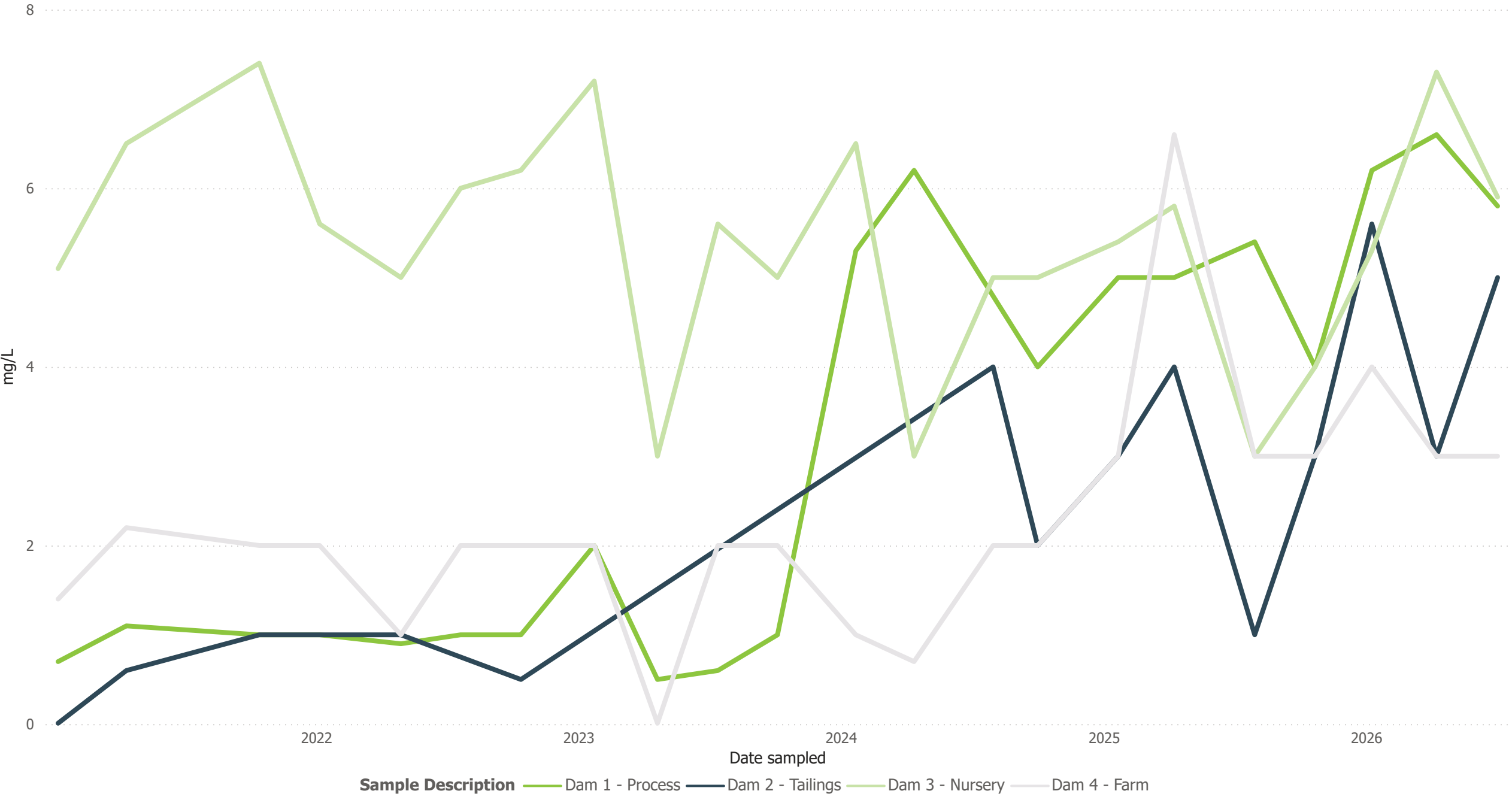
pH - Surface Water



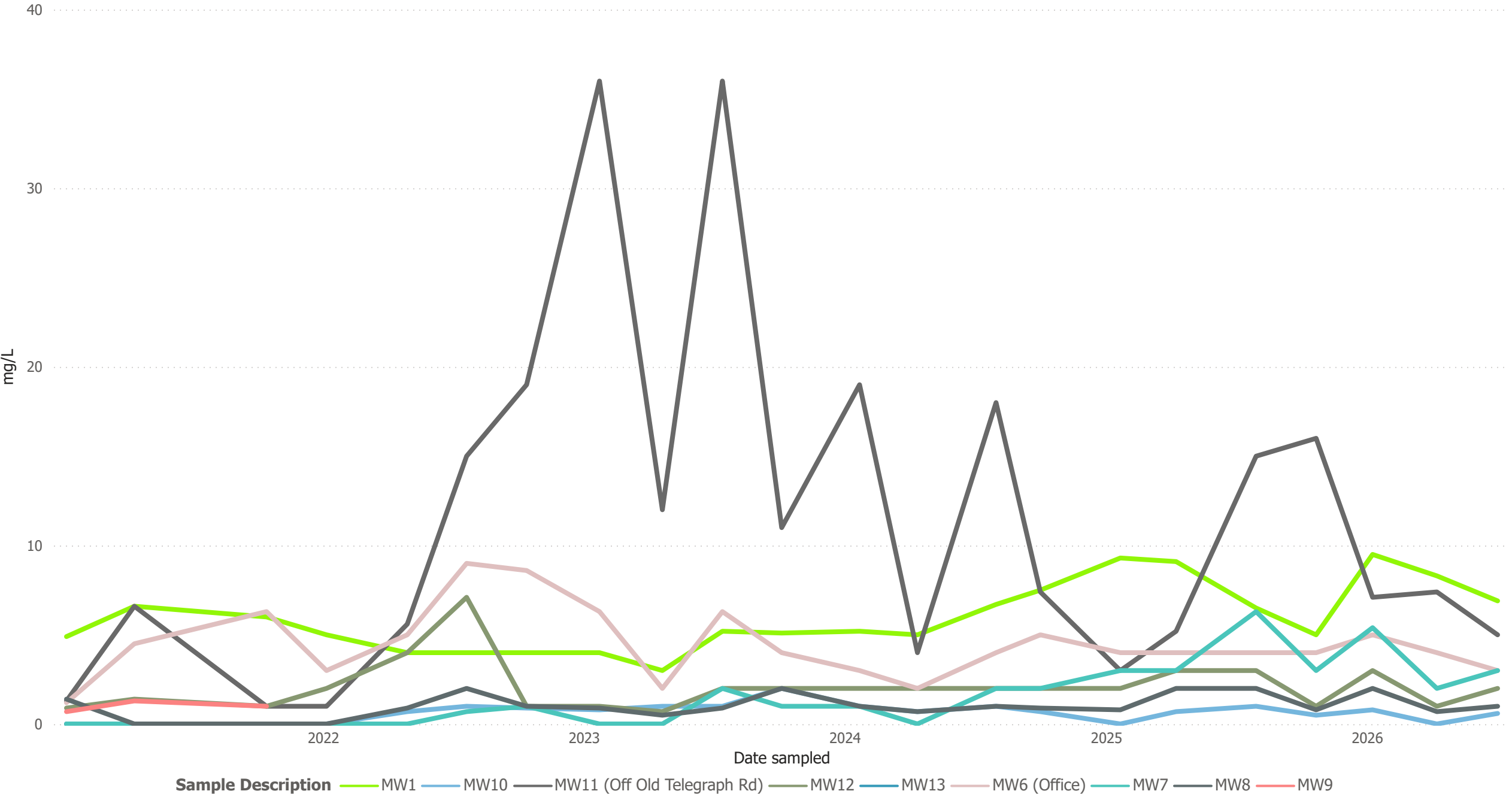
pH - Groundwater



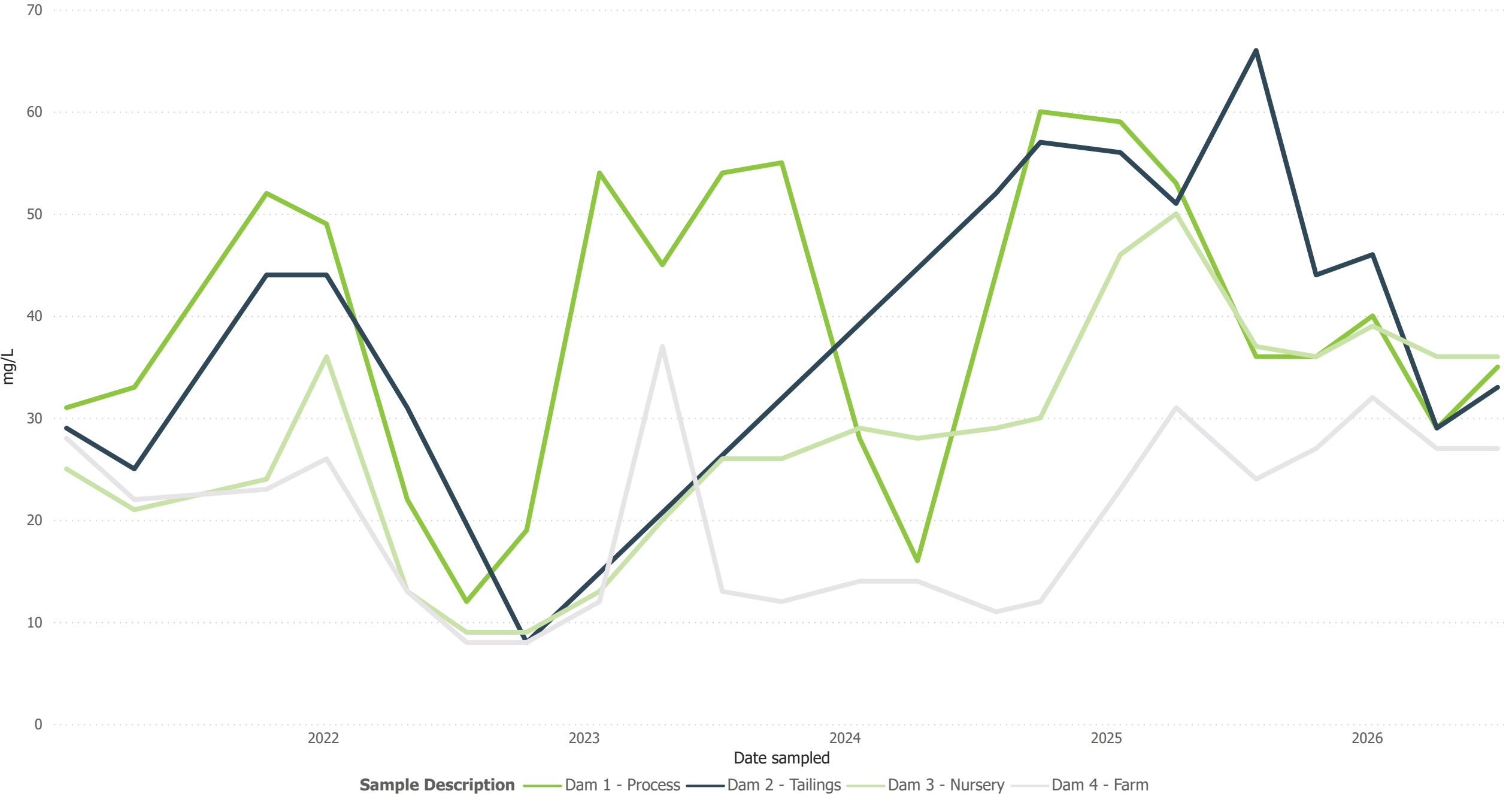
Calcium - Surface Water



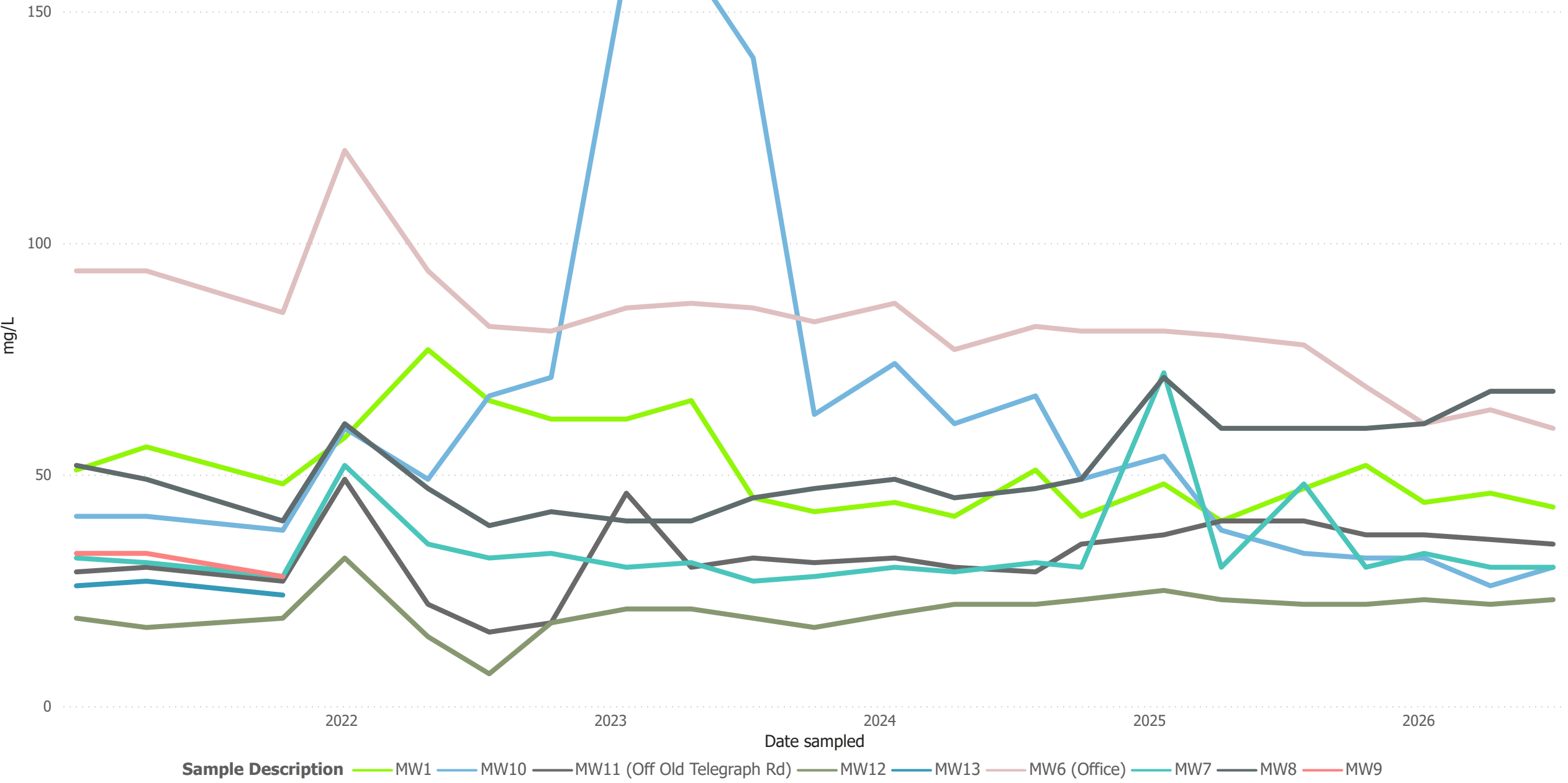
Calcium - Groundwater



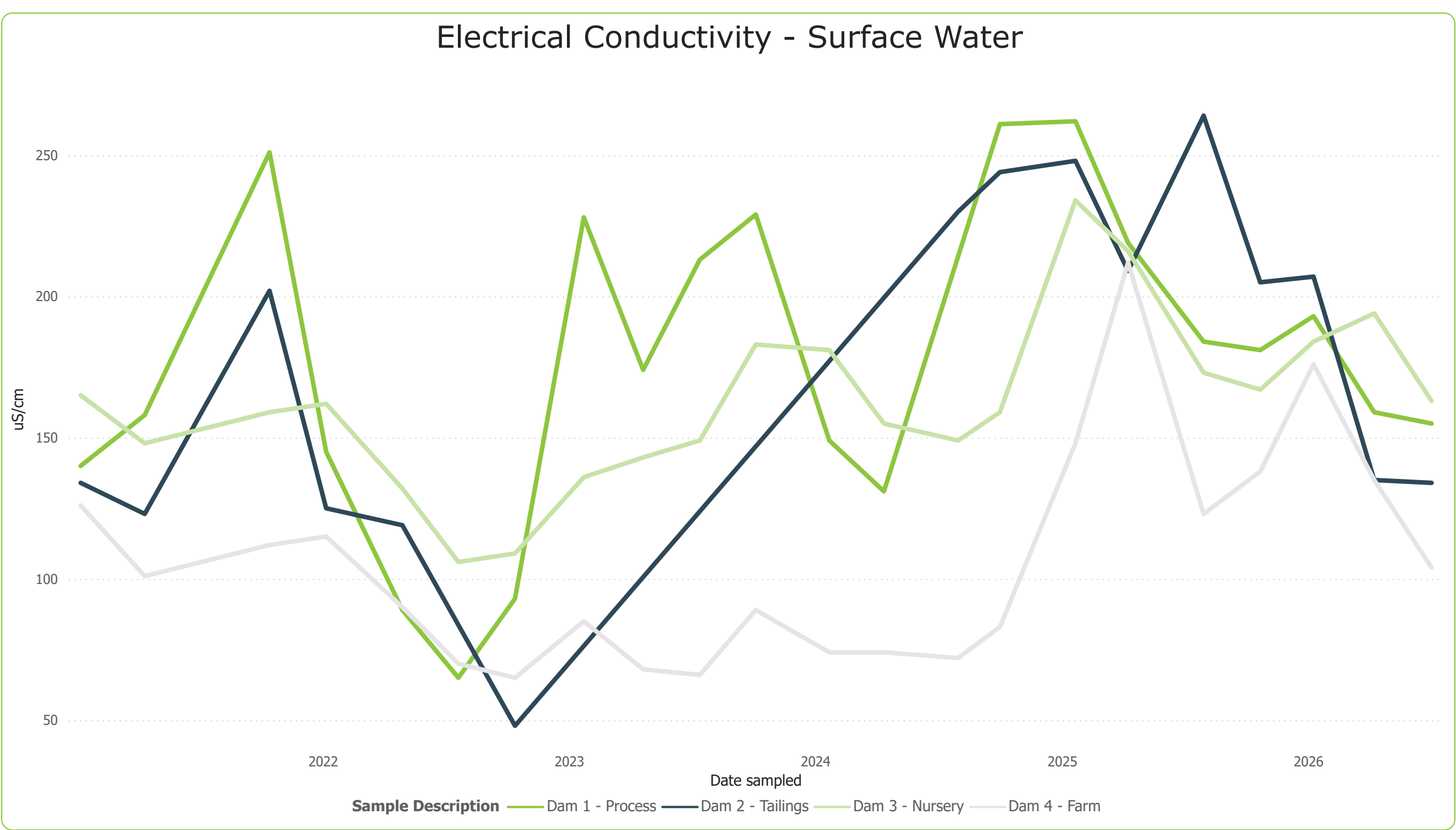
Chloride - Surface Water



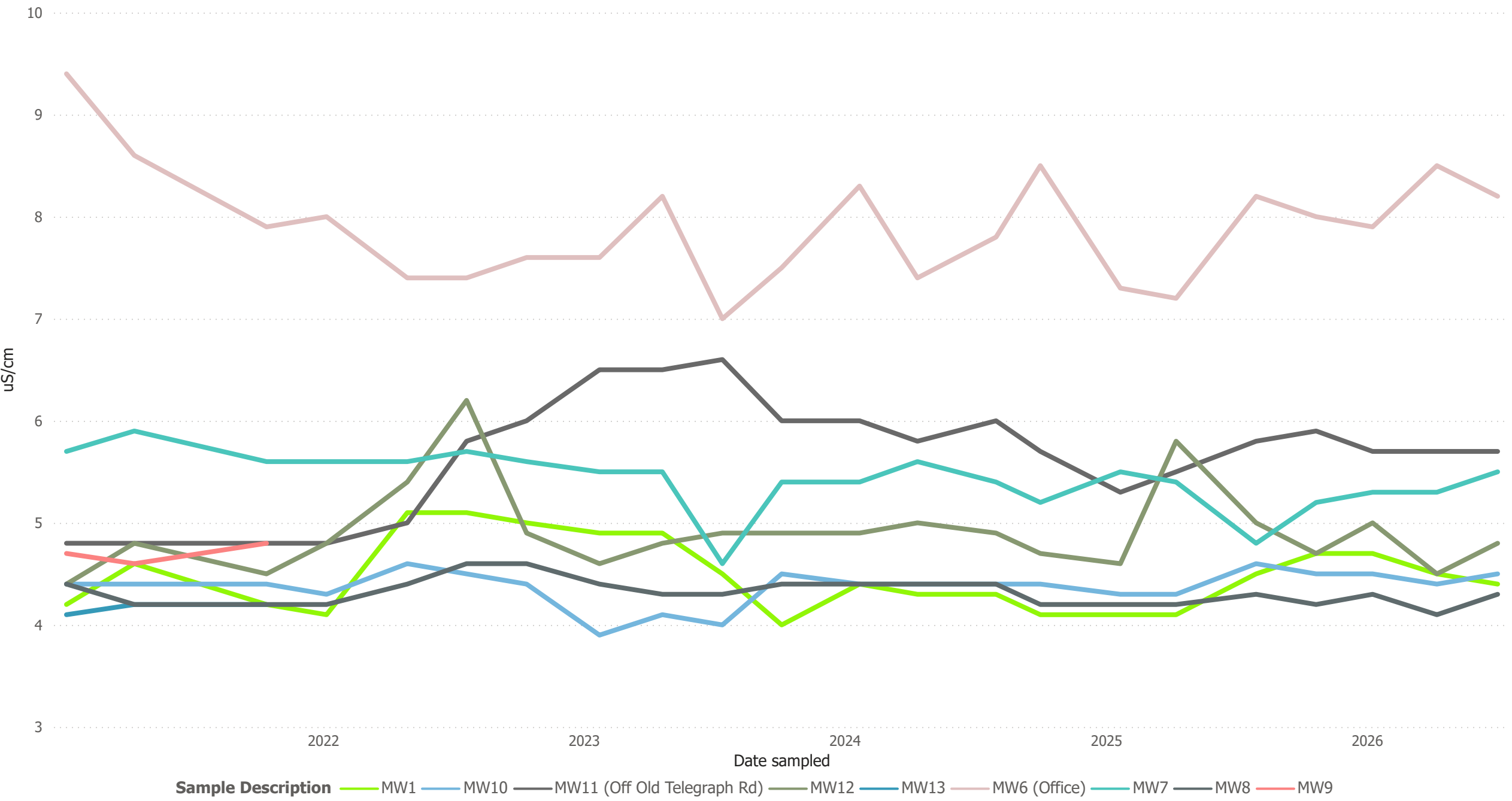
Chloride - Groundwater



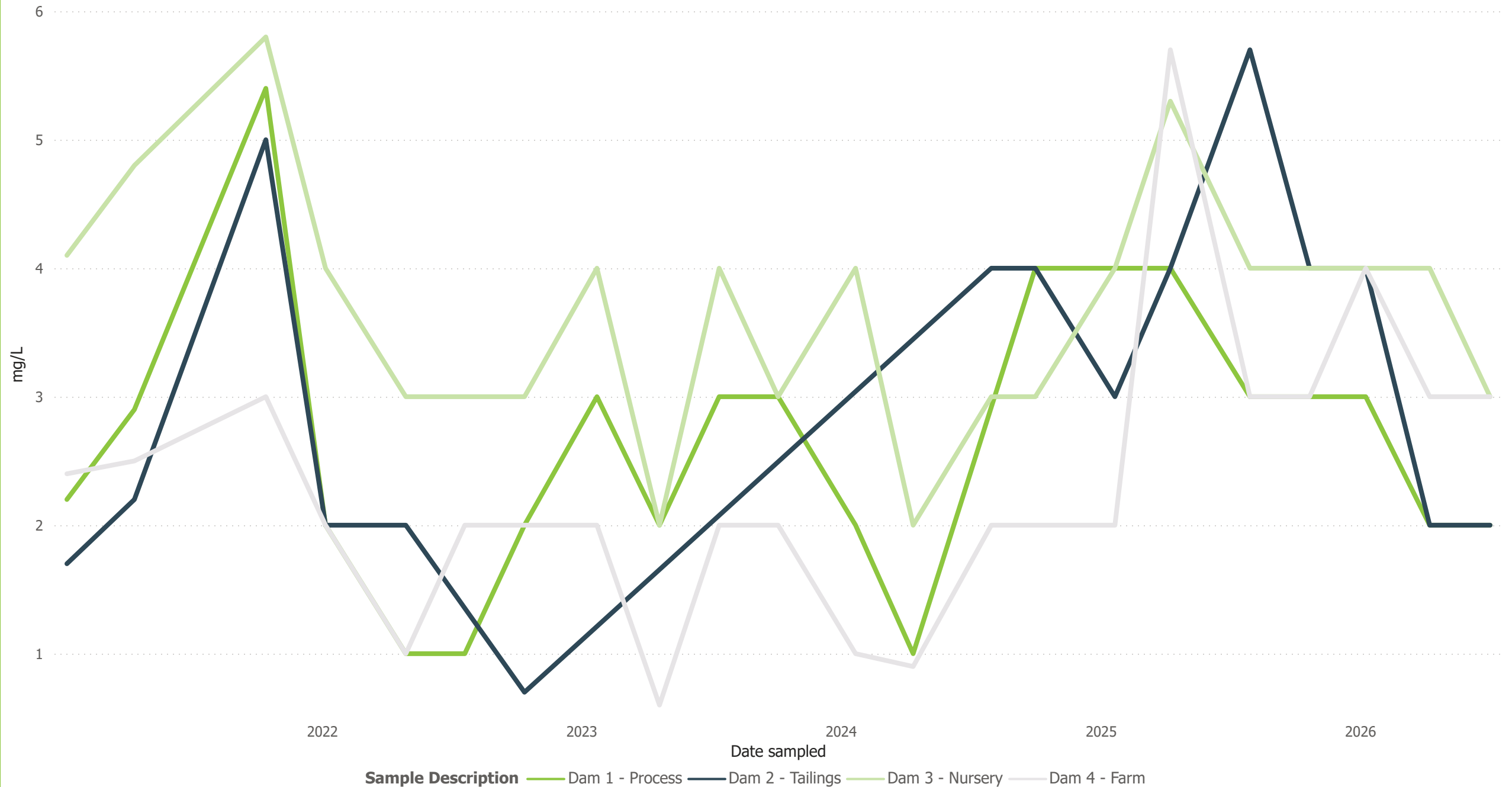
Electrical Conductivity - Surface Water



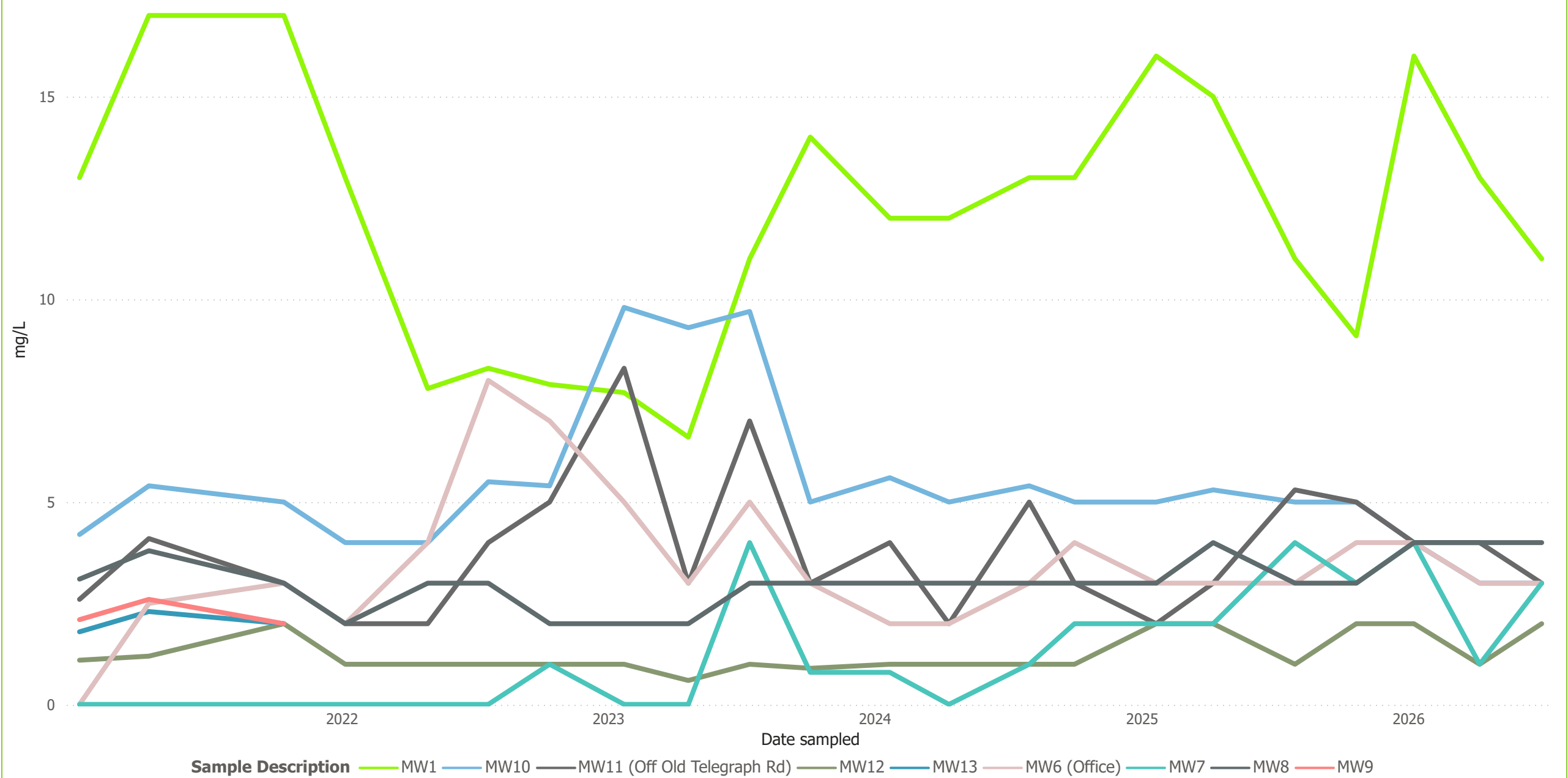
Electrical Conductivity - Groundwater



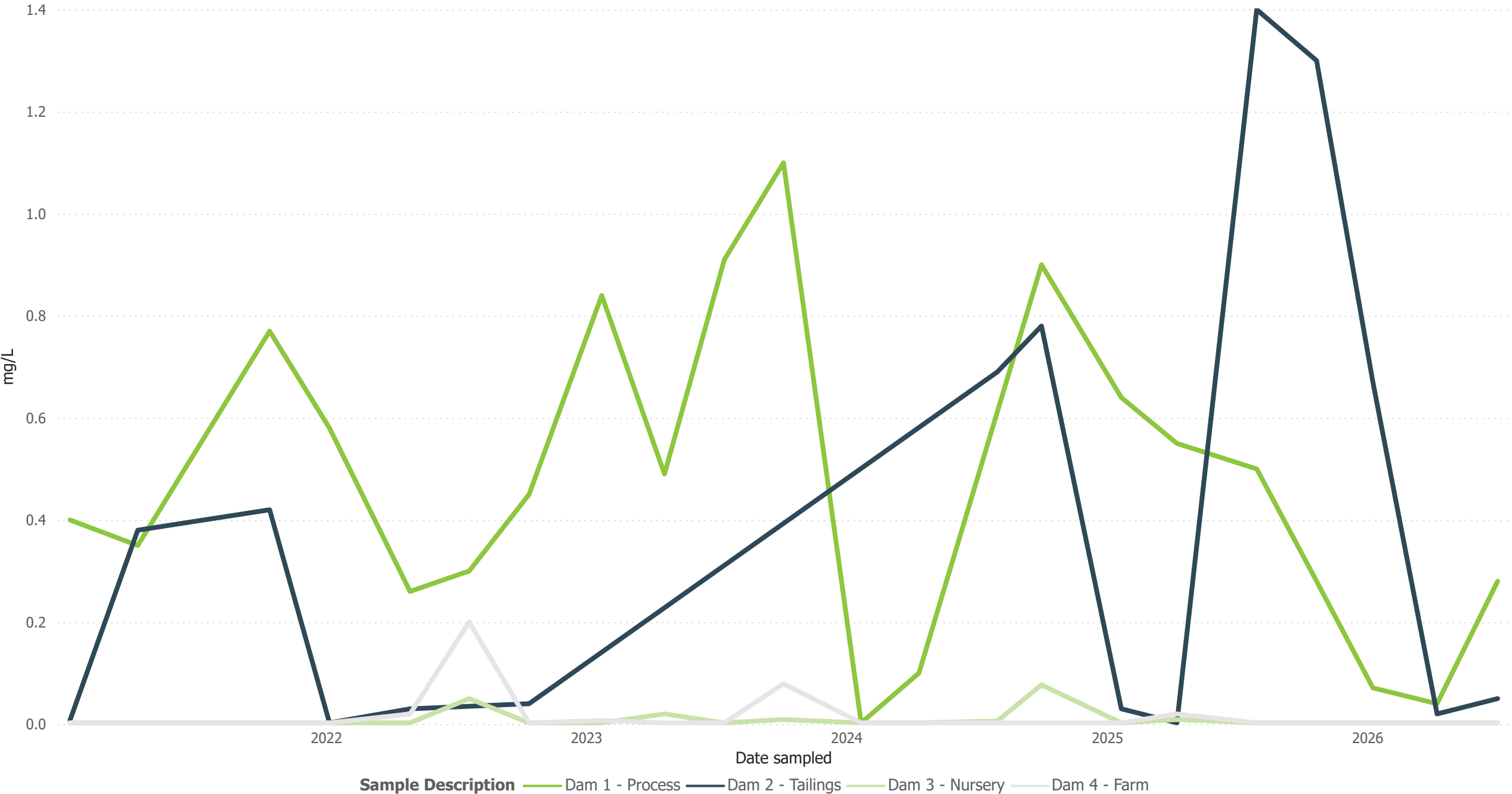
Magnesium - Surface Water



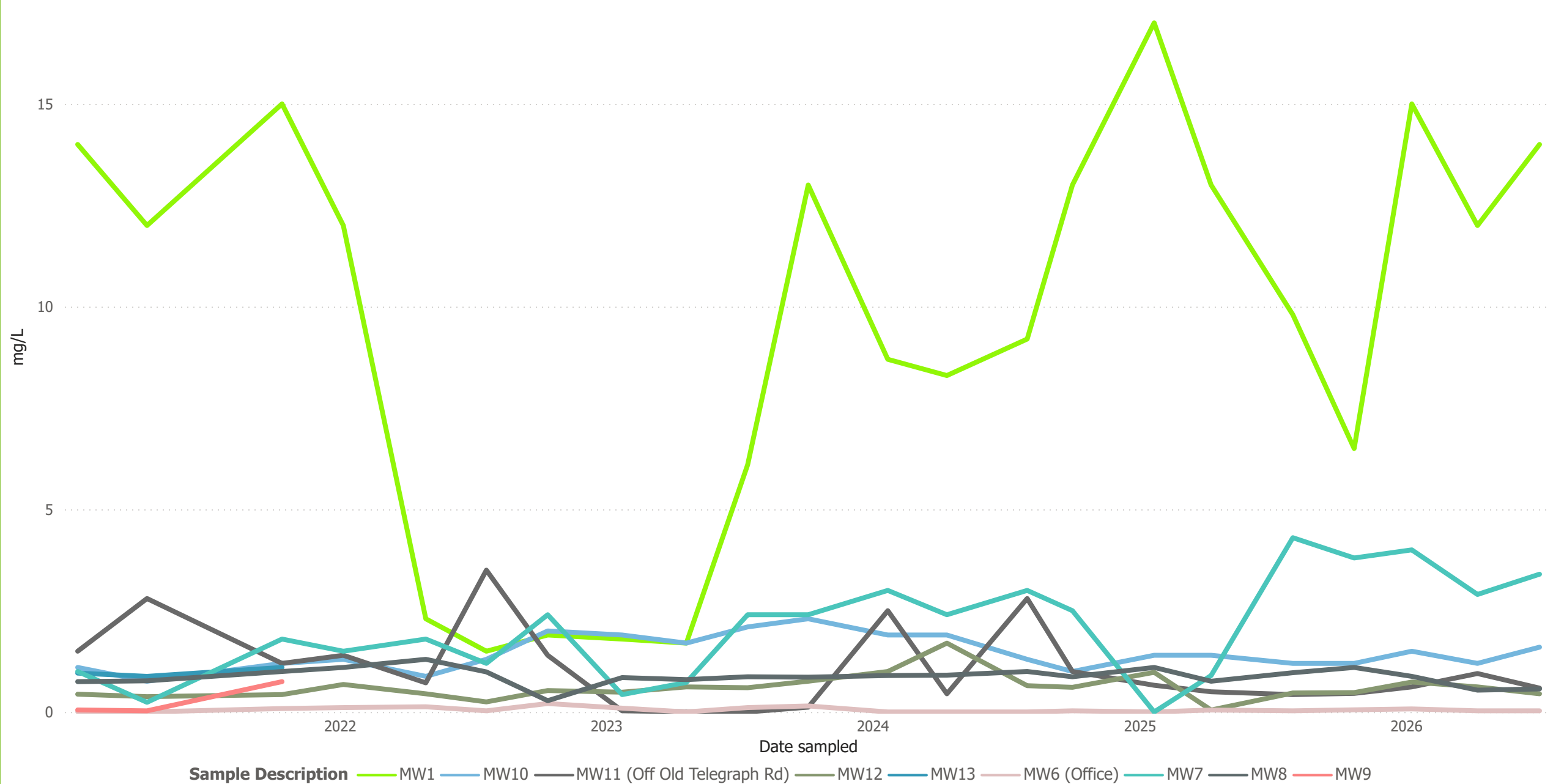
Magnesium - Groundwater



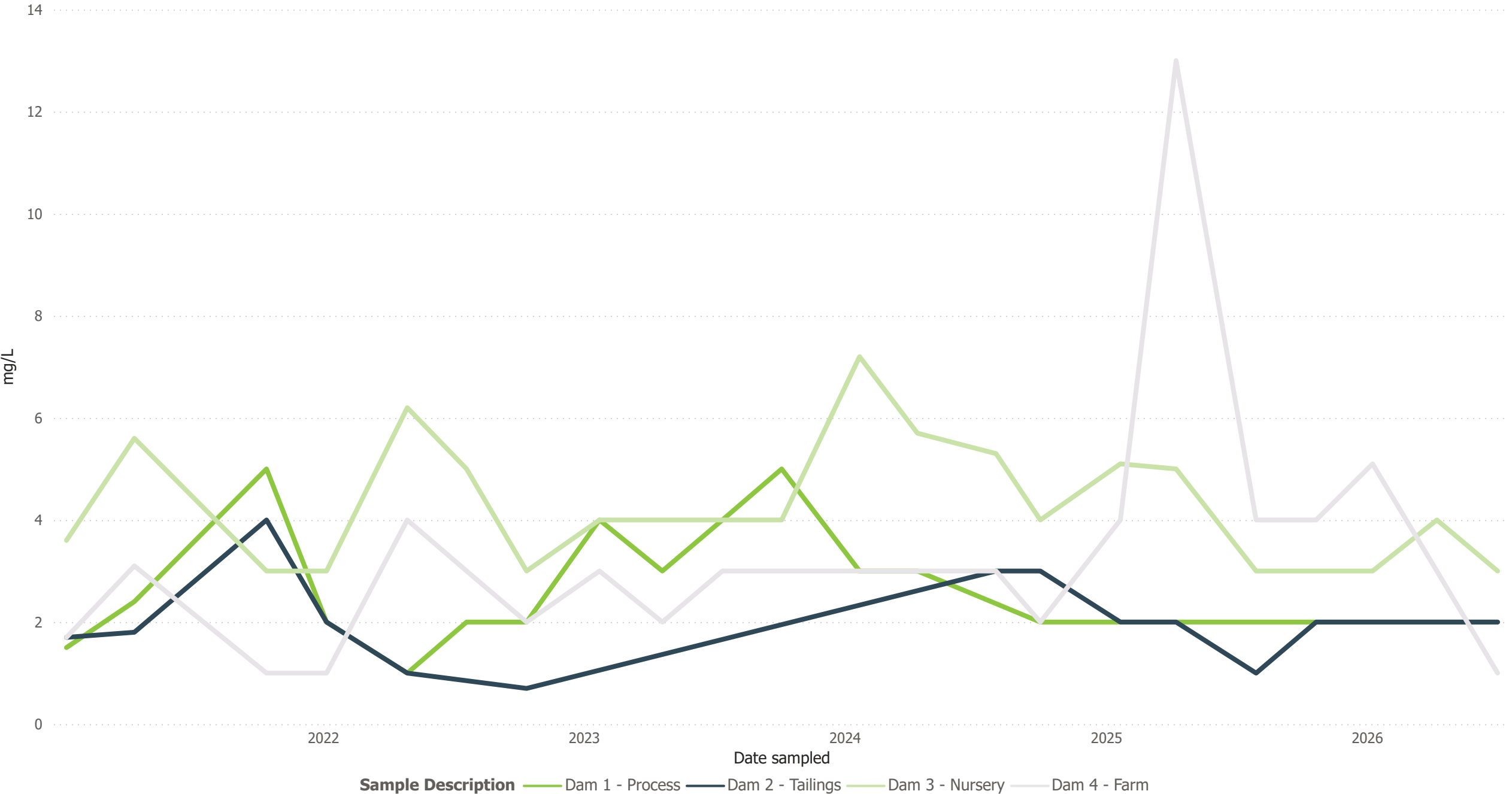
Nitrate - Surface Water



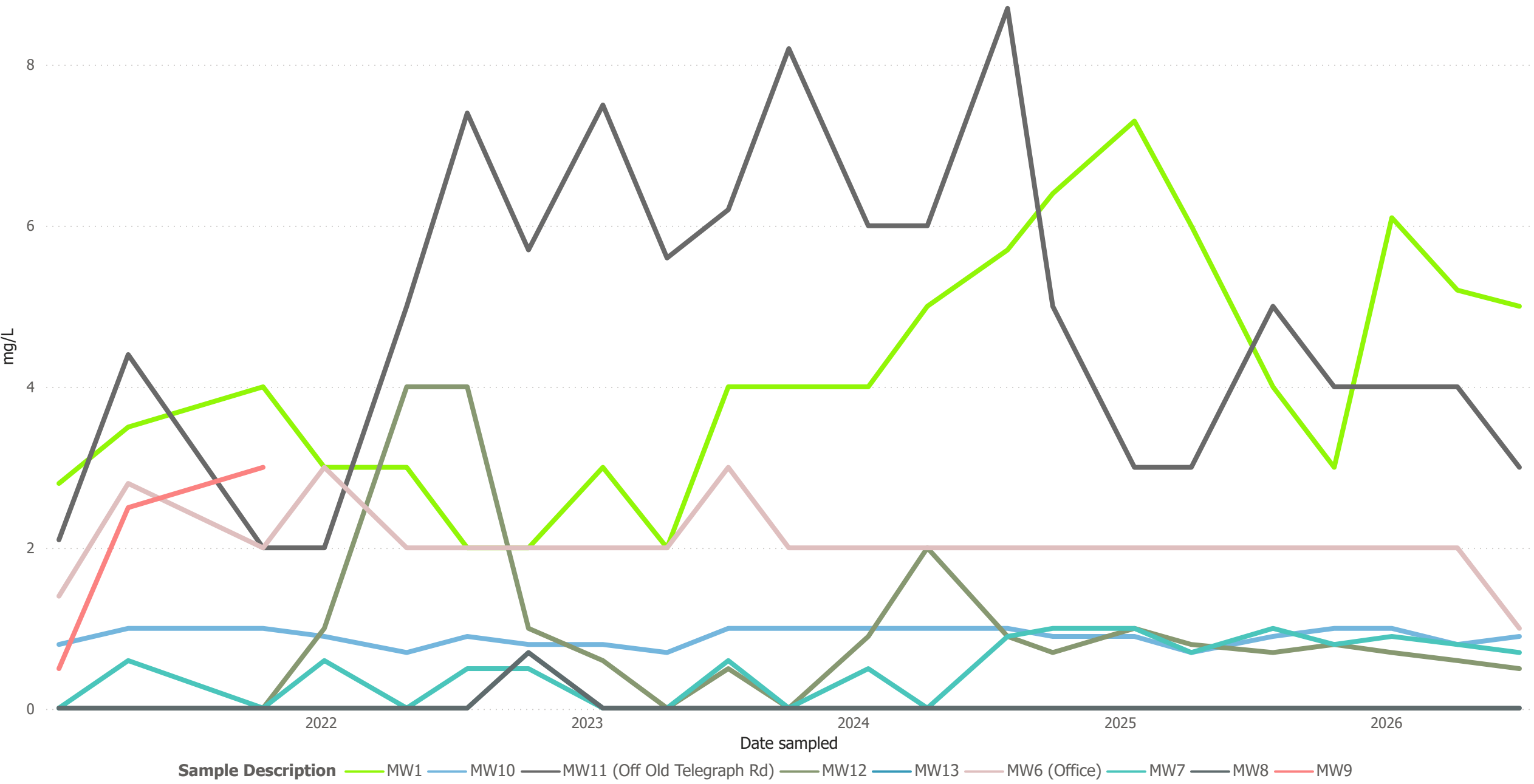
Nitrate - Groundwater



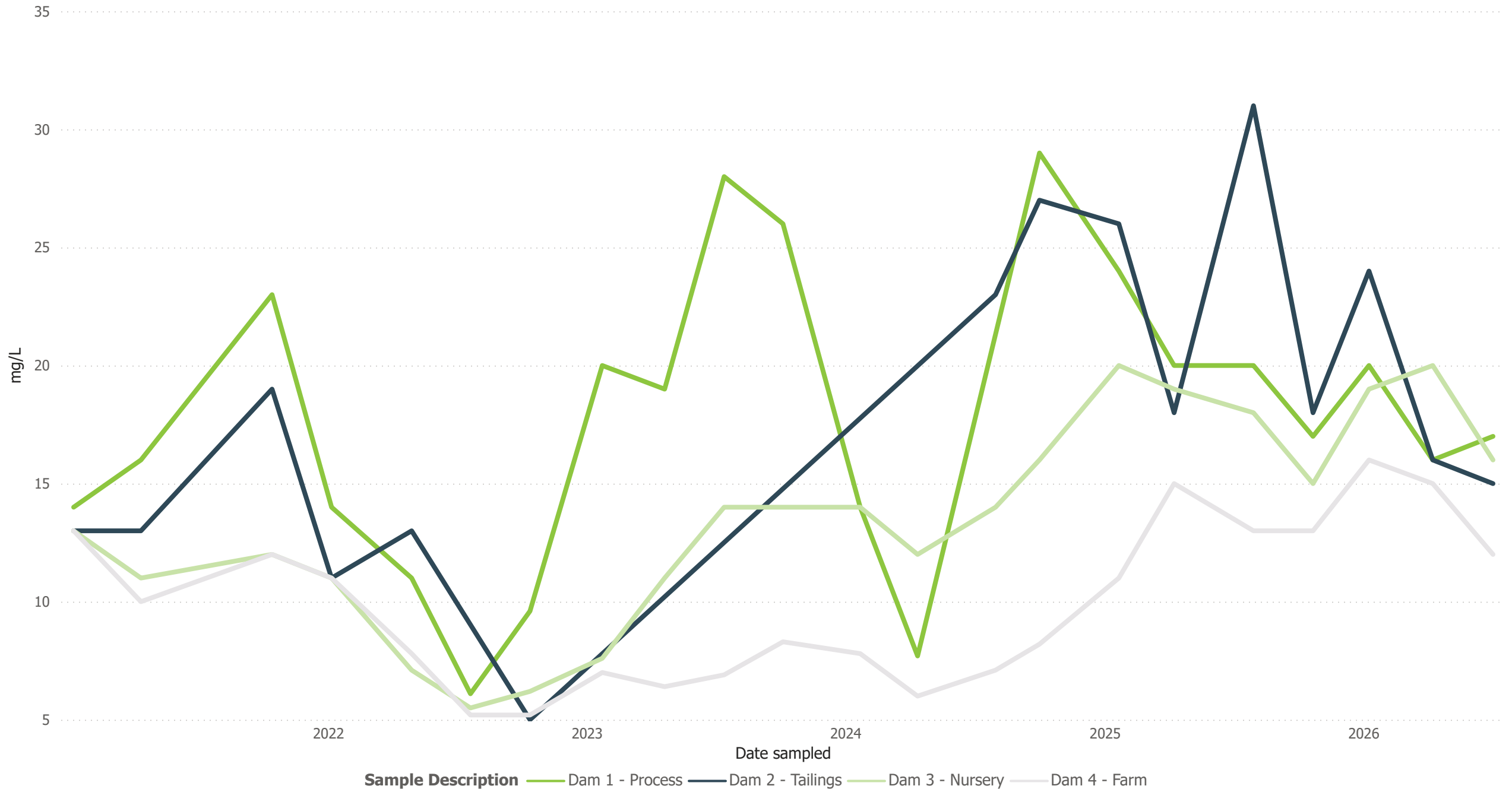
Potassium - Surface Water



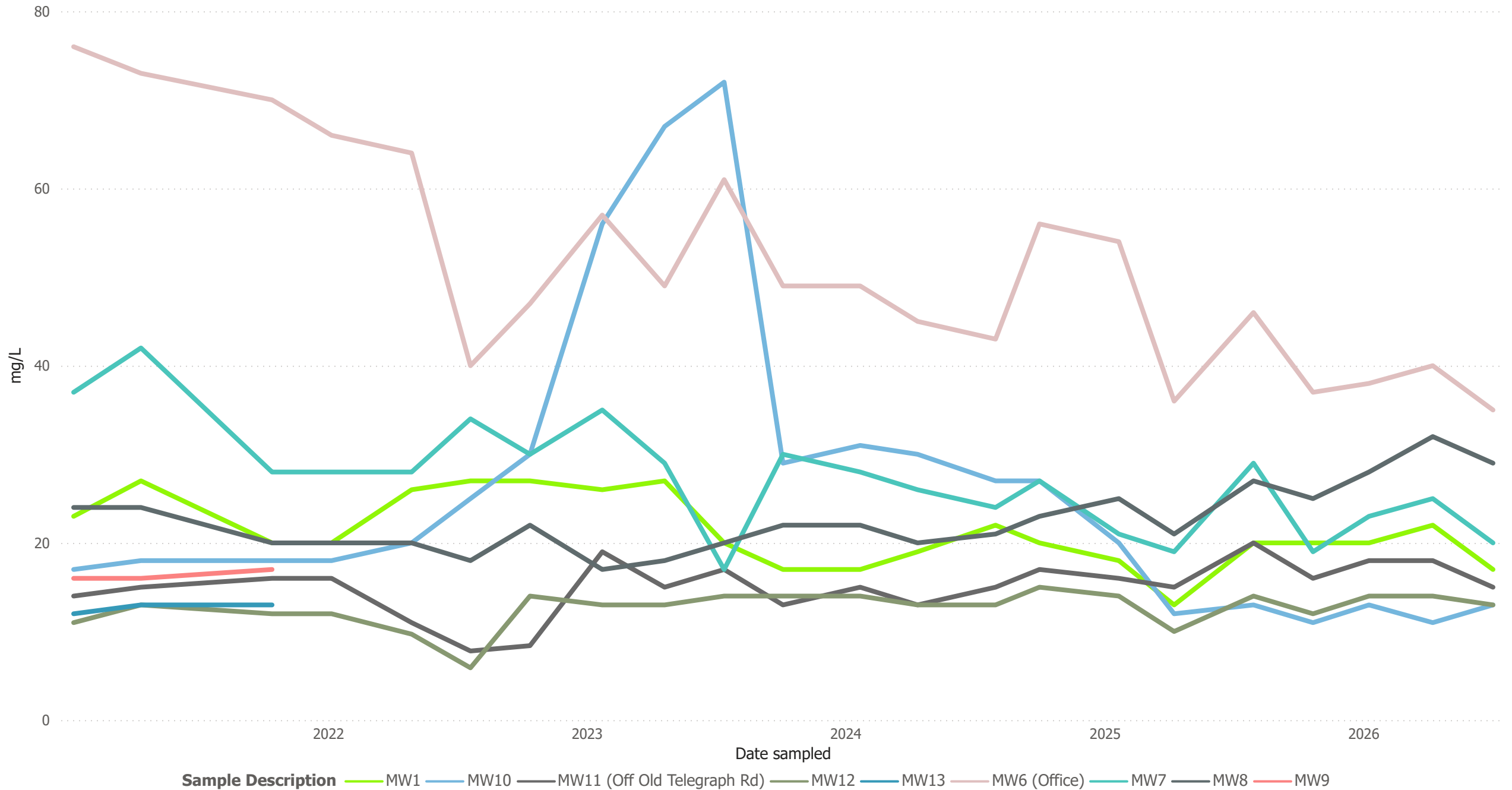
Potassium - Groundwater



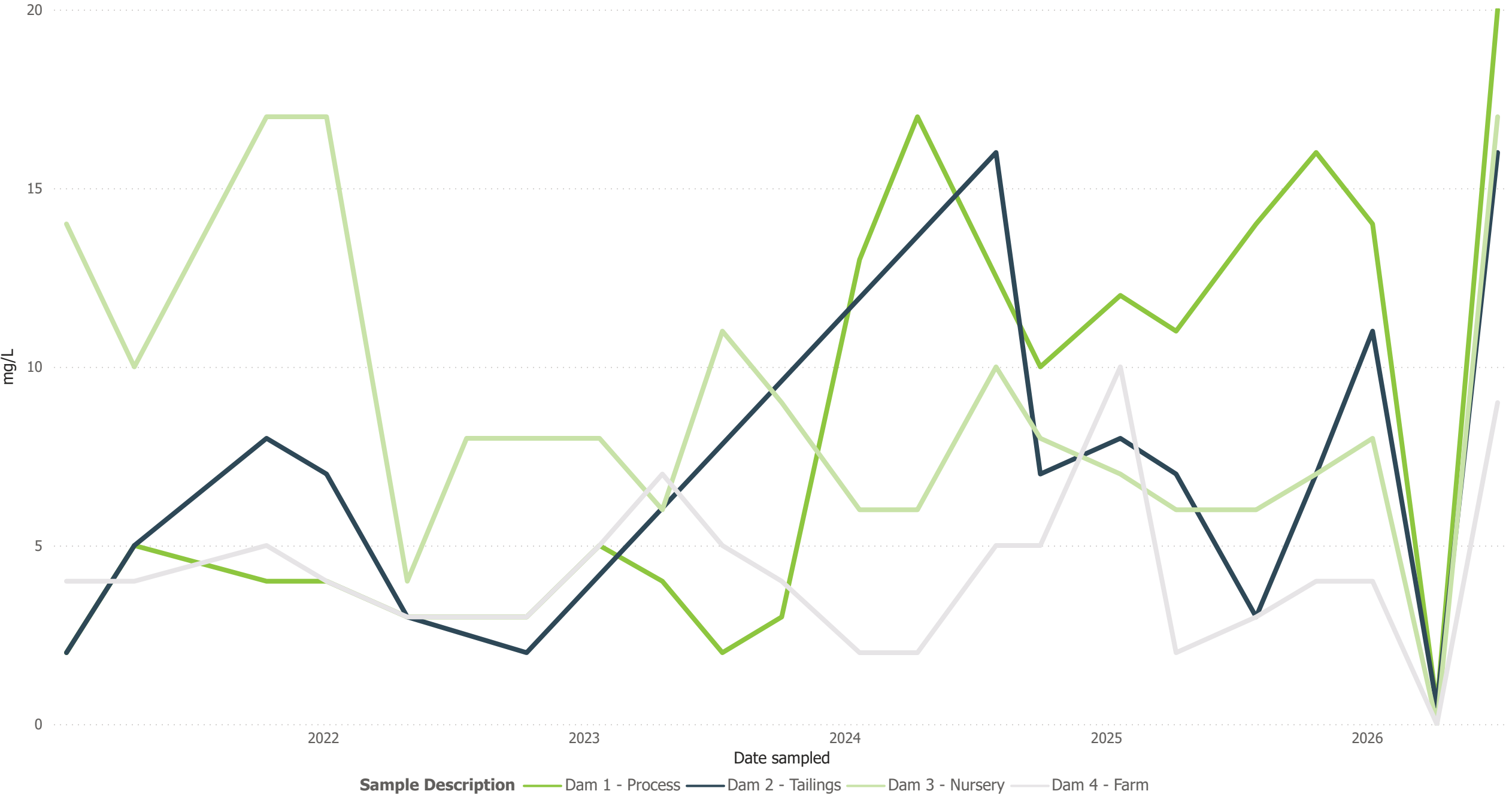
Sodium - Surface Water



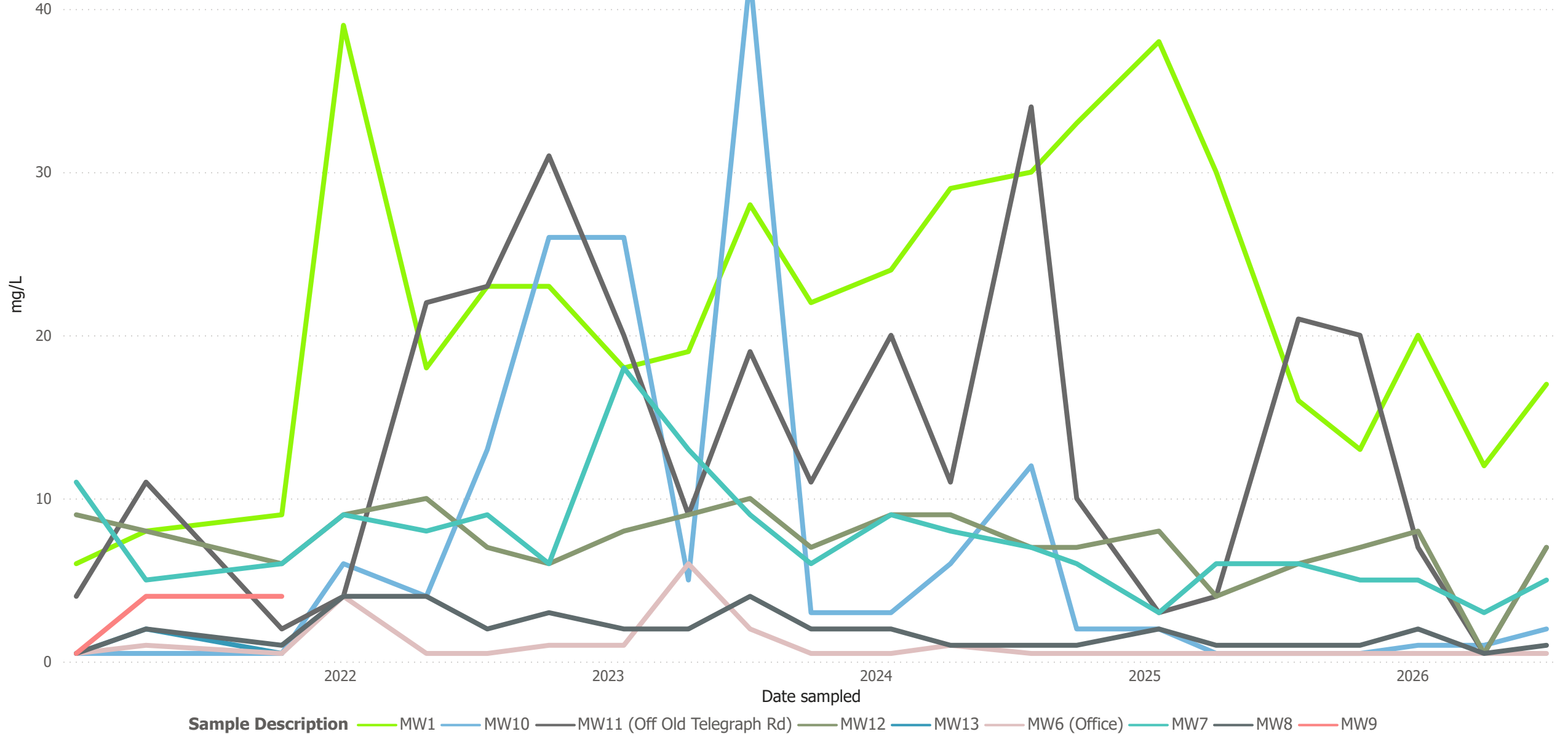
Sodium - Groundwater



Sulphate - Surface Water



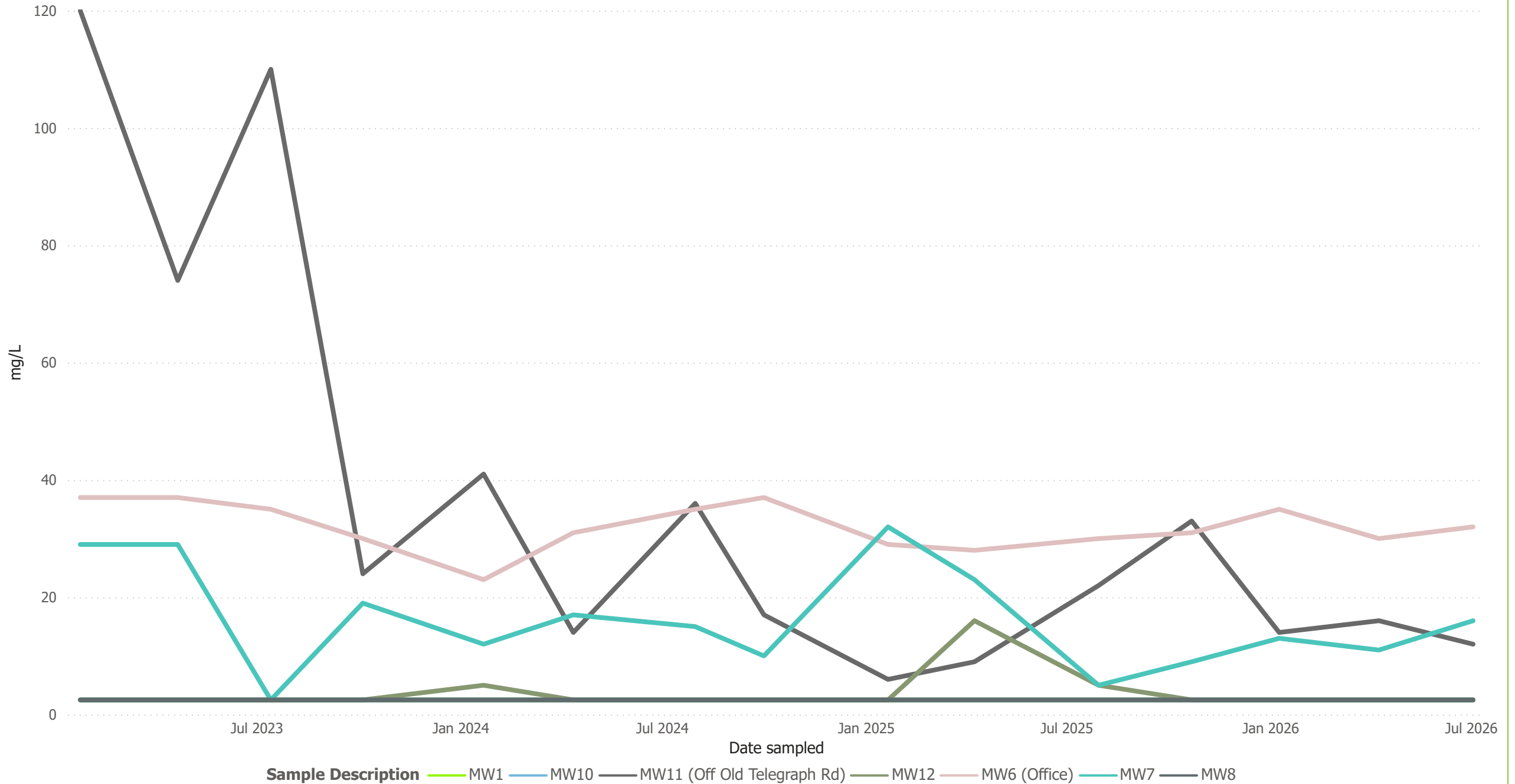
Sulphate - Groundwater



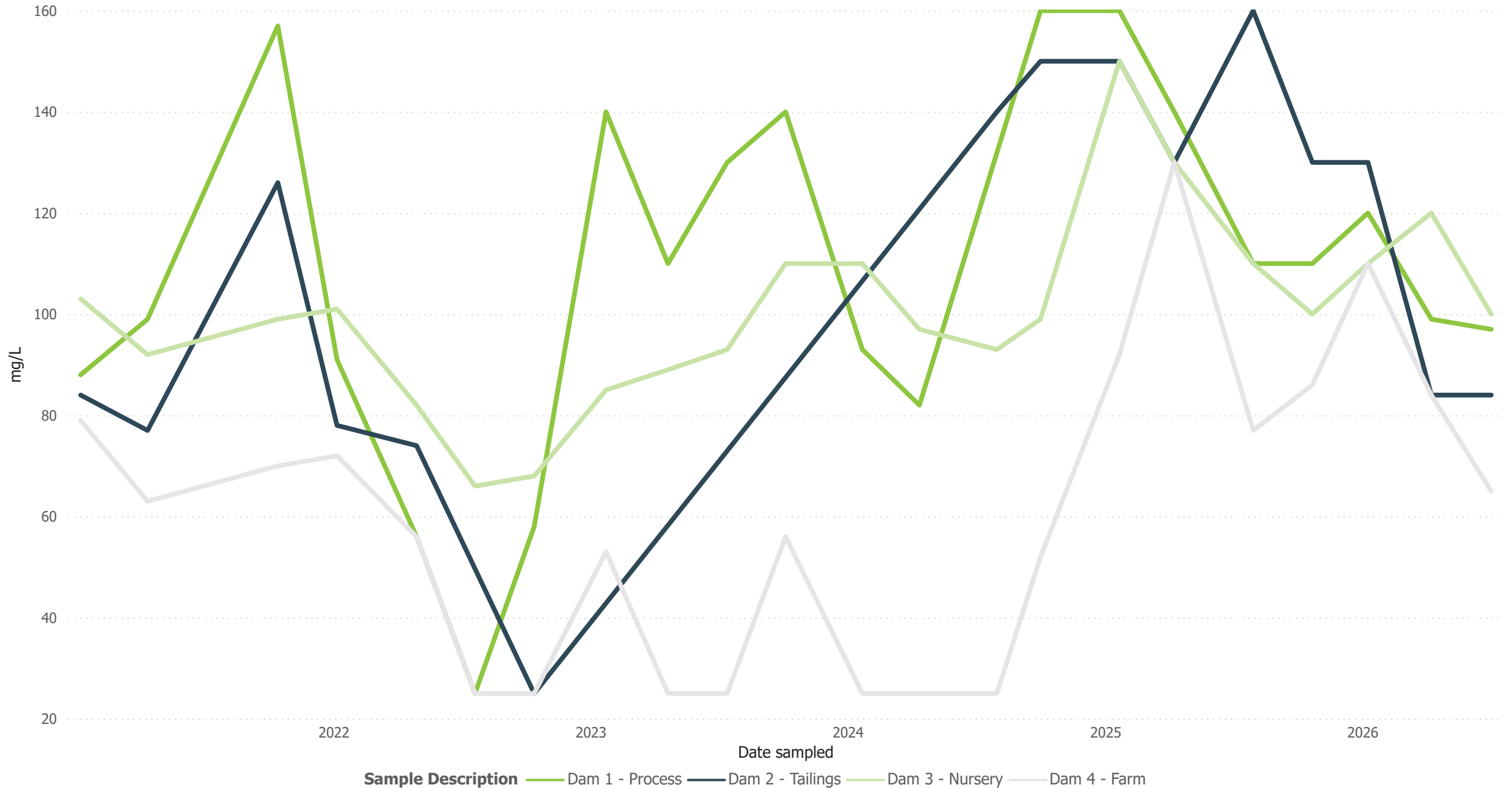
Total Alkalinity - Surface Water



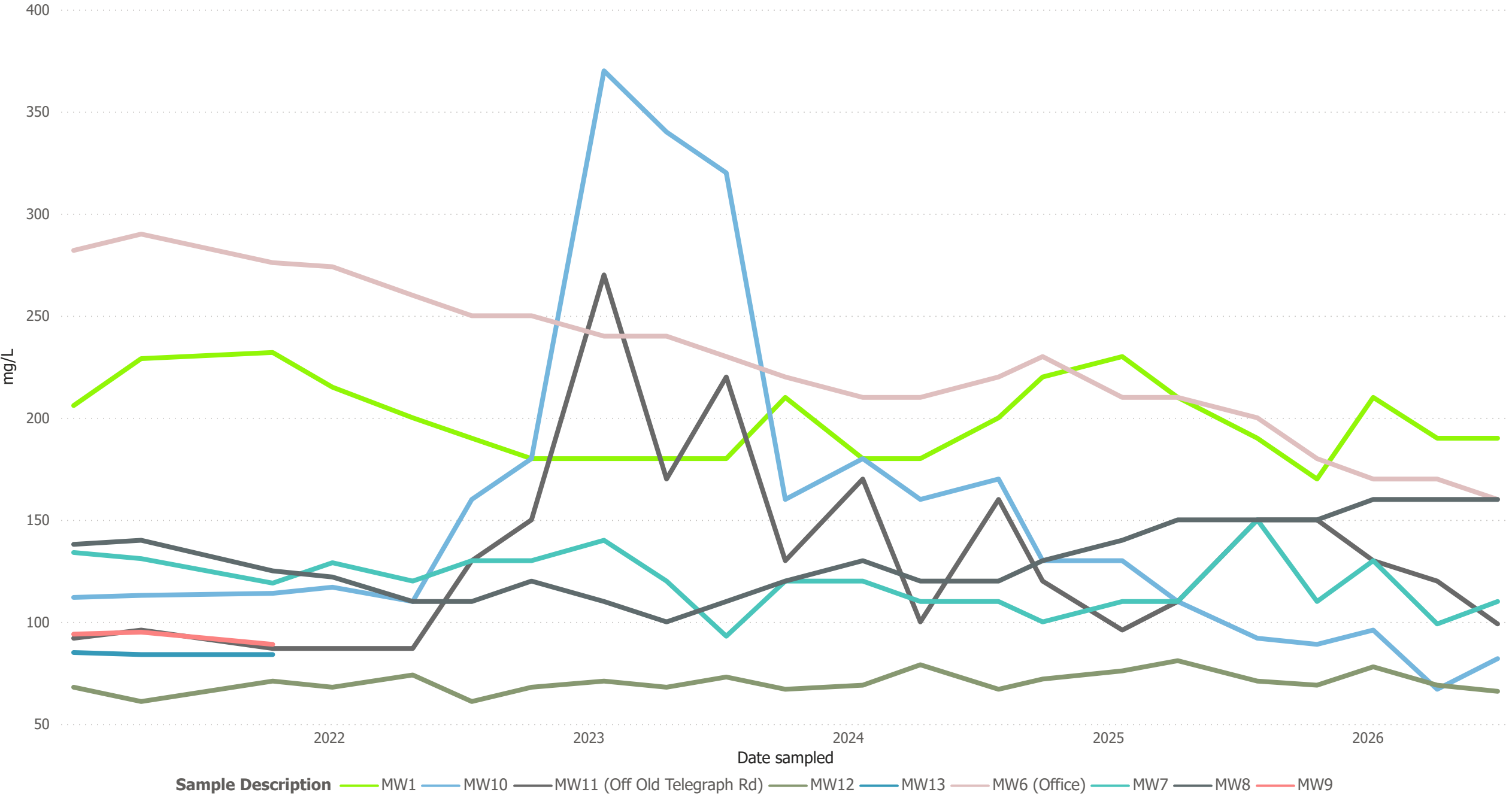
Total Alkalinity - Groundwater



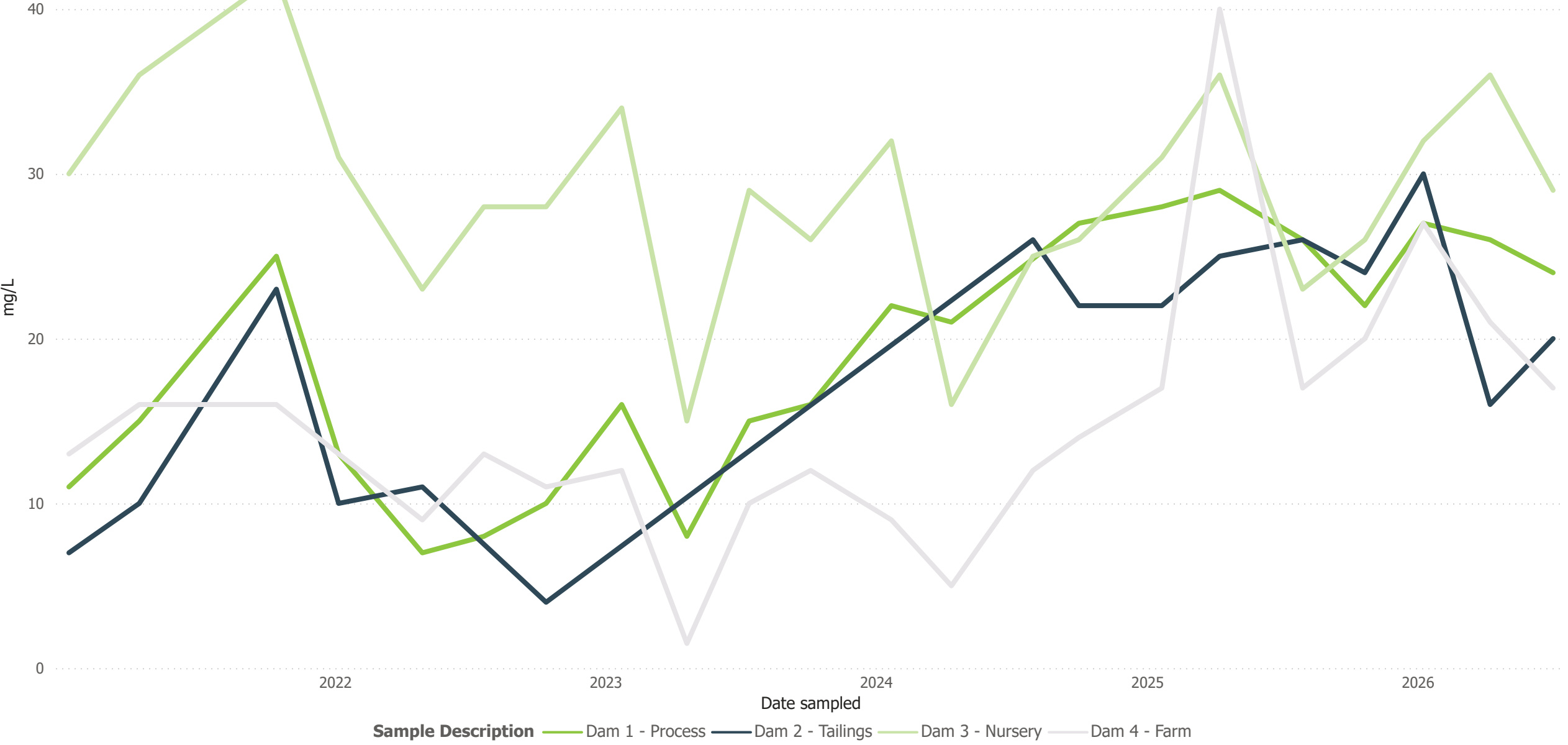
Total Dissolved Solids - Surface Water



Total Dissolved Solids - Groundwater



Total Hardness - Surface Water



Total Hardness - Groundwater

