

7 January 2026

File Ref: OIAPR-1274023063-45780

By email: [REDACTED]

Tēnā koe [REDACTED]

Request for information 2025-421

I refer to your request for information dated 28 November 2025, which was received by Greater Wellington Regional Council (Greater Wellington) on 1 December 2025. You have requested the following:

“I would like to inquire re Masterton cbd area air quality and river water quality and town water quality levels for metallic particles PM2.5 and under in particular aluminium, barium, strontium and sulphur dioxide over the last 2 years or so.”

Greater Wellington’s response follows:

Air quality

Greater Wellington does not have air quality information specific for the CBD (Central Business District) but we do have information on PM2.5 particles in air at sites around the Masterton urban area which is available from the LAWA website: <https://www.lawa.org.nz/explore-data/wellington-region/air-quality/masterton/masterton-west-pownall-street>.

Greater Wellington does not have information on levels of sulphur dioxide in air for Masterton and we do not routinely measure levels of metallic particles in air.

I am therefore refusing that part of your request under section 17(g) of the Local Government Official Information and Meetings Act (the Act) on the basis that the information requested is not held by Greater Wellington and we have no grounds for believing that the information is either

- (i) held by another local authority or a department or Minister of the Crown or organisation;
- or
- (ii) connected more closely with the functions of another local authority, or a department or Minister of the Crown or organisation.

However, we do have some information on levels of metals in air from a year-long study undertaken in 2018. A summary of the study *Air pollution in Masterton 2018* is attached. The elemental dataset used for this study was provided by GNS Science (now Earth Sciences NZ) and is based on analysis of 24-hour samples of PM2.5 particulate matter collected at the now closed Masterton East monitoring station (at Chanel College). The GNS Science summary table of the elemental data includes barium (Ba), aluminium (Al) and strontium (Sr).

Table 1 - Elemental analysis of 24-hour particulate matter samples (PM2.5) collected in 2018 from Masterton East monitoring station (data source GNS Science).

	Unit	Average	Max	Min	Median	StdDev	Av uncert	Av LOD	No. Samples >LOD	% Samples >LOD
PM2.5	µg m ⁻³	13	58	0.4	10	11				
BC	ng m ⁻³	3242	11563	203	2273	2866	238	209	101	98
Na	ng m ⁻³	211	699	30	175	144	25	6	103	100
Mg	ng m ⁻³	29	94	0	26	19	6	5	95	92
Al	ng m ⁻³	19	64	0	17	11	10	9	85	83
Si	ng m ⁻³	28	540	0	20	54	5	3	99	96
P	ng m ⁻³	0	2	0	0	0	1	2	0	0
S	ng m ⁻³	119	838	10	101	97	18	9	103	100
Cl	ng m ⁻³	314	1059	8	233	251	32	1	103	100
K	ng m ⁻³	152	676	11	109	143	16	1	103	100
Ca	ng m ⁻³	2	15	0	0	4	3	3	22	21
Ti	ng m ⁻³	1	5	0	1	1	2	2	10	10
V	ng m ⁻³	0	2	0	0	0	0.2	0.2	16	16
Cr	ng m ⁻³	0	2	0	0	0	1	1.3	4	4
Mn	ng m ⁻³	1	6	0	1	1	2	2	26	25
Fe	ng m ⁻³	7	26	0	5	6	3	3	81	79
Co	ng m ⁻³	0	2	0	0	0	0.4	0	15	15
Ni	ng m ⁻³	0	1	0	0	0	0.4	0.5	30	29
Cu	ng m ⁻³	1	4	0	0	1	1	1	34	33
Zn	ng m ⁻³	7	36	0	5	8	2	1	82	80
Ga	ng m ⁻³	0	4	0	0	1	1	1	11	11
As	ng m ⁻³	5	56	0	0	9	3	4	36	35
Se	ng m ⁻³	0	3	0	0	1	1	2	9	9
Br	ng m ⁻³	1	6	0	0	1	6	0.9	37	36
Sr	ng m ⁻³	1	6	0	0	1	1	1	29	28
Mo	ng m ⁻³	2	9	0	1	2	1	1	46	45
Cd	ng m ⁻³	2	22	0	0	5	8	11	7	7
Sn	ng m ⁻³	0	9	0	0	1	3	4	7	7
Sb	ng m ⁻³	2	19	0	0	4	8	10	7	7
Te	ng m ⁻³	1	14	0	0	3	6	7	7	7

Cs	ng m ⁻³	3	24	0	0	6	10	13	9	9
Ba	ng m ⁻³	4	35	0	0	7	14	16	7	7
La	ng m ⁻³	7	56	0	0	11	15	17	16	16
Ce	ng m ⁻³	33	312	0	0	68	131	165	7	7
Sm	ng m ⁻³	38	319	0	0	72	69	84	16	16
Pb	ng m ⁻³	9	36	0	7	8	3	3	74	72
Hg	ng m ⁻³	1	5	0	0	1	0.3	0	29	28
In	ng m ⁻³	2	22	0	0	3	3	4	24	23
W	ng m ⁻³	69	300	0	10	89	119	134	25	24

Notes:

1. GNS Science XRF detection limits are defined in terms of the uncertainty (1σ) in the blank (from 10 repeat measurements). This ignores the effect of other elements which generally is small except for the light elements (potassium and lower) where overlapping spectral lines will increase the detection limit.
2. Derived from Compendium of Methods for the Determination of Inorganic Compounds in Ambient Air (EPA/625/R-96/010a), Method IO-3.3 Determination of Metals in Ambient Particulate Matter Using X-Ray Fluorescence (XRF) Spectroscopy
3. LOD = Limit of detection

River Water Quality

Greater Wellington maintains routine river water quality monitoring sites across the region, however neither particulate nor dissolved metals are included in this sampling. As part of a nationwide water quality project, Greater Wellington included dissolved metals in the analysis for a sample taken on 5 November 2025 in the Waipoua River at Colombo Road Bridge. Results are in the following Table 2.

Table 2 - Metals and sulphate testing results from Waipoua River at Colombo Road Bridge on 5 November 2025

Analyte	Unit	Result Text	Numeric Result Value	Detection Limit Value
Sulphate	g/m3	5.3	5.3384	0.5
Dissolved Aluminium	g/m3	0.012	0.0116835	0.003
Dissolved Arsenic	g/m3	< 0.0010	0.000262222	0.001
Dissolved Boron	g/m3	< 0.05	0.0161145	0.05
Dissolved Calcium	g/m3	8.7	8.691614615	0.05
Dissolved Copper	g/m3	< 0.0005	0.0003965	0.0005
Dissolved Iron	g/m3	< 0.02	0.0148705	0.02
Dissolved Magnesium	g/m3	2.1	2.1067525	0.02
Dissolved Manganese	g/m3	0.0011	0.0010885	0.0005
Dissolved Potassium	g/m3	1.12	1.124322	0.05
Dissolved Sodium	g/m3	8.1	8.0629905	0.02
Dissolved Zinc	g/m3	< 0.0010	0.0005555	0.001
Total Copper	g/m3	< 0.00053	0.0004088	0.00053
Total Zinc	g/m3	< 0.0011	0.0002233	0.0011

Greater Wellington is transferring part of your request regarding “town water quality” to Masterton District Council pursuant to section 12 of the Local Government Official Information and Meetings Act 1987 on the basis that this information is not held by Greater Wellington Regional Council but is more likely to be held by Masterton District Council as they have the function of providing town water supply.

Further correspondence on this matter will therefore come to you directly from Masterton District Council. In this regard the 20-working daytime limit for providing you with a substantive response to this request will begin from the day after Masterton District Council receives this transfer.

If you have any concerns with the decision(s) referred to in this letter, you have the right to request an investigation and review by the Ombudsman under section 27(3) of the Local Government Official Information and Meetings Act 1987.

Please note that it is our policy to proactively release our responses to official information requests where appropriate. Our response to your request will be published shortly on Greater Wellington’s website with your personal information removed.

Nāku iti noa, nā



Lian Butcher

Kaiwhakahaere Matua Rōpū Taiao | Group Manager Environment

PROACTIVE RELEASE