

# Portland Water District Analysis of Water Supplies

(as sampled on 4/10/18 unless otherwise noted)

Constituent	Units	Greater Portland Untreated	Greater Portland Treated	Greater Portland Distribution <sup>1</sup>	Steep Falls Untreated	Steep Falls Treated	MCL <sup>2</sup> (for comparison only)
<b>Physical</b>							
Color	SU	<5	<5	<5	5	5	15
Conductivity	µS	58.6	74.0	74.8	249.2	236.7	**
Total Residue	mg/L	48	43	40	132	84	500
Turbidity	NTU	0.25	0.20	0.20 <sup>3</sup>	0.13	0.13	1
<b>Inorganic Non-metals</b>							
Residual chlorine <sup>4</sup>	mg/L	NA	2.11	1.60	NA	1.18	4
Alkalinity (as CaCO <sub>3</sub> )	mg/L	5.2	9.4	9.0	11.5	18.9	**
Carbon dioxide	mg/L	1.7	0.4	0.1	9.7	1.0	**
Ammonia - N	mg/L	<0.01	0.53	0.53	<0.01	<0.01	**
Nitrite - N	mg/L	0.004	0.004	0.004	<0.002	0.003	1
Nitrate - N	mg/L	<0.23	<0.23	<0.23	1.68	1.43	10
Chloride	mg/L	8.2	10	10	50	49	250
Dissolved Oxygen	mg/L	13	21	14	7.4	12	**
Fluoride	mg/L	0.07	0.68	0.65	0.10	0.75	4
Hardness (as CaCO <sub>3</sub> )	mg/L	8.9	10.3	9.5	25.1	24.2	150
pH <sup>4</sup>	SU	6.4	8.4	7.8	6.7	7.6	8.5
Silica	mg/L	4.0	4.1	3.5	9.6	10.6	**
Phosphorus	mg/L	0.01	0.38	0.38	0.03	0.03	**
Sulfate <sup>5</sup>	mg/L	NA	3	NA	NA	<1	250
<b>Inorganic Metals</b>							
Arsenic	mg/L	<0.0030	0.0043	<0.0030	0.0149	<0.0030	0.05
Barium	mg/L	0.0035	0.0046	0.0037	0.0070	0.0073	2
Cadmium	mg/L	<0.00065	<0.00065	<0.00065	<0.00065	<0.00065	0.005
Calcium	mg/L	2.66	3.06	2.88	7.16	6.87	**
Chromium	mg/L	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032	0.1
Copper <sup>6</sup>	mg/L	<0.0047	<0.0047	0.0062	0.118	0.0104	1.3
Iron <sup>6</sup>	mg/L	<0.058	0.32	<0.058	<0.058	0.129	0.3
Lead <sup>6</sup>	mg/L	<0.0042	0.0048	0.0066	<0.0042	<0.0042	0.015
Magnesium	mg/L	0.540	0.648	0.555	1.75	1.71	**
Manganese <sup>5</sup>	mg/L	NA	<0.005	NA	NA	<0.005	0.05
Mercury <sup>5</sup>	mg/L	NA	<0.0001	NA	NA	<0.0001	0.002
Nickel	mg/L	<0.0034	0.0080	<0.0034	<0.0034	<0.0034	0.1
Potassium	mg/L	0.443	0.518	0.464	1.94	1.7	**
Selenium <sup>5</sup>	mg/L	NA	<0.001	NA	NA	<0.001	0.05
Silver	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.05
Sodium	mg/L	4.87	9.38	8.73	31.4	31.5	100
Zinc	mg/L	0.0076	0.130	0.116	0.0248	0.0373	5

Aggregate Organic							
Carbon, total organic	mg/L	2.6	2.6	2.5	<1.0	<1.0	**
Pesticide/Herbicide <sup>7</sup>							
	µg/L	NA	ND	NA	NA	ND	**
Asbestos <sup>8</sup>							
(million fibers/L)	10 <sup>6</sup> f/L	NA	<0.12	NA	NA	NA	7
Radionuclides <sup>9</sup>							
Gross alpha	pCi/L	NA	2.5	NA	NA	5.0	15

Footnotes:

<sup>1</sup> Distribution Sample collected at 334 Cottage Rd., South Portland

<sup>2</sup> MCL= Maximum Contaminant Level. The highest level of a contaminant that is allowed or recommended in drinking water.

<sup>3</sup> Greater Portland Treated Turbidity measured on 4/9/18.

<sup>4</sup> Chlorine and pH vary throughout the distribution system so values at your tap may differ from these locations.

<sup>5</sup> Sulfate, manganese, mercury and selenium sampled in June 2017 for both Greater Portland and Steep Falls.

<sup>6</sup> Copper, iron and lead can be affected by the condition of distribution system pipes and interior plumbing.

<sup>7</sup> Pesticide/herbicide analyzed in June and September 2017 (Greater Portland) and September 2017 (Steep Falls).

<sup>8</sup> Asbestos analyzed in July 2011 in Cumberland area.

<sup>9</sup> Gross alpha sampled in June 2015 for both Greater Portland and Steep Falls.

\*\* - MCL does not exist for these constituents

NA – Not analyzed

ND – None detected

**SUPPLEMENTARY WATER QUALITY INFORMATION  
SAMPLES COLLECTED AFTER TREATMENT**

CONTAMINANT	MCL <sup>1</sup> (MG/L)		GREATER PORTLAND	STEEP FALLS
<b>VOLATILE ORGANICS (EPA 524.2) Collected in June 2017 (Greater Portland and Steep Falls)</b>				
BENZENE	0.005		<0.0005	<0.0005
CARBON TETRACHLORIDE	0.005		<0.0005	<0.0005
p-DICHLOROBENZENE	0.075		<0.0005	<0.0005
1,2-DICHLOROETHANE	0.005		<0.0005	<0.0005
1,1-DICHLOROETHENE	0.007		<0.0005	<0.0005
1,1,1-TRICHLOROETHANE	0.2		<0.0005	<0.0005
TRICHLOROETHENE	0.005		<0.0005	<0.0005
VINYL CHLORIDE	0.002		<0.0005	<0.001
METHYL TERT-BUTYL ETHER (State req.)	0.035		<0.0005	<0.0005
o-DICHLOROBENZENE	0.6		<0.0005	<0.0005
cis-1,2-DICHLOROETHENE	0.07		<0.0005	<0.0005
trans-1,2-DICHLOROETHENE	0.1		<0.0005	<0.0005
1,2-DICHLOROPROPANE	0.005		<0.0005	<0.001
ETHYLBENZENE	0.7		<0.0005	<0.0005
CHLOROBENZENE	0.1		<0.0005	<0.0005
STYRENE	0.1		<0.0005	<0.001
TETRACHLOROETHENE	0.005		<0.0005	<0.0005
TOLUENE	0.1		<0.0005	<0.001
XYLENES	10		<0.0005	<0.003
DICHLOROMETHANE	0.005		<0.0005	<0.001
1,2,4-TRICHLOROBENZENE	0.07		<0.0005	<0.0005
1,1,2-TRICHLOROETHANE	0.005		<0.0005	<0.0005
1,2-DIBROMO-3-CHLOROPROPANE	STWV <sup>2</sup>		STWV <sup>2</sup>	STWV <sup>2</sup>
ETHYLENE DIBROMIDE	STWV <sup>2</sup>		STWV <sup>2</sup>	STWV <sup>2</sup>
<b>SYNTHETIC ORGANIC-PESTICIDES (EPA 525.2)</b>				
Collected in June 2017 (Greater Portland) and September 2017 (Greater Portland and Steep Falls)				
ATRAZINE	0.003		<0.001	<0.001
ALACHLOR (LASSO)	0.002		<0.001	<0.001
BENZO(A)PYRENE	0.0002		<0.0002	<0.0002
BHC GAMMA (LINDANE)	0.0002		<0.0002	<0.0002
BIS (2-ETHYLHEXYL) ADIPATE	0.4		<0.001	<0.001
BIS (2-ETHYLHEXYL) PHTHALATE	0.001		<0.001	<0.001
ENDRIN	0.002		<0.001	<0.001
HEPTACHLOR	0.0004		<0.0004	<0.0004
HEPTACHLOR EPOXIDE	0.0002		<0.0002	<0.0002
HEXACHLOROBENZENE	0.001		<0.001	<0.001
HEXACHLOROCYCLOPENTADIENE	0.05		<0.001	<0.001
METHOXYCHLOR	0.04		<0.001	<0.001
SIMAZINE	0.004		<0.001	<0.001
<b>PESTICIDES/PCB'S (EPA 508.1)</b>				
Collected in June 2017 (Greater Portland) and September 2017 (Greater Portland and Steep Falls)				
CHLORDANE	0.002		<0.0005	<0.0005
POLYCHLORINATED BIPHENYLS, TOTAL	0.0005		<0.0005	<0.0005

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 SAMPLES COLLECTED AFTER TREATMENT**

<b>CONTAMINANT</b>	<b>MCL<sup>1</sup> (MG/L)</b>		<b>GREATER PORTLAND</b>	<b>STEEP FALLS</b>
TOXAPHENE	0.003		<0.002	<0.002
<b>CARBAMATES (EPA 531.1)</b>				
Collected in June 2017 (Greater Portland) and September 2017 (Greater Portland and Steep Falls).				
ALDICARB	NO MCL		<0.0005	<0.0005
ALDICARB SULFONE	NO MCL		<0.0005	<0.0005
ALDICARB SULFOXIDE	NO MCL		<0.0005	<0.0005
CARBOFURAN	0.04		<0.0005	<0.0005
OXAMYL	0.2		<0.0005	<0.0005
<b>SYNTHETIC ORGANICS - HERBICIDES (EPA 515.3)</b>				
Collected in June 2017 (Greater Portland) and September 2017 (Greater Portland and Steep Falls)				
2,4-D	0.07		<0.005	<0.005
2,4,5 TP (SILVEX)	0.05		<0.005	<0.005
DALAPON	0.2		<0.001	<0.001
DINOSEB	0.007		<0.005	<0.005
PENTACHLOROPHENOL	0.001		<0.001	<0.001
PICLORAM	0.5		<0.001	<0.001
FOOTNOTES:				
<sup>1</sup> MCL- Maximum Contaminant Level, The highest level of a contaminant allowed or recommended in drinking water.				
<sup>2</sup> STWV-State waiver, no testing required.				