

Determinands in Waterbase – TCM version 4

Determinands for Inputs and Discharges only:

Determinand	Unit
Flow	m3/s
Volume	m3

Nutrients, oxygen and organic matter:

The units noted in the determinand list have been used in the data tables.

Determinand	Unit	
	Unit in Water	Unit for Inputs and Discharges
Ammonium	µMol N	tonnes/y
BOD5	µMol O2	tonnes/y
BOD7	µMol O2	tonnes/y
Chlorophyll a	µg/l	
COD	µMol O2	tonnes/y
CODCr	mg/l O2	tonnes/y
CODMn	mg/l O2	tonnes/y
Dissolved Oxygen	µMol O2	
Nitrate	µMol N	tonnes/y
Nitrate to Orthophosphate Ratio	Molar ratio	
Nitrite	µMol N	tonnes/y
Orthophosphate	µMol P	tonnes/y
Oxygen Saturation	%	
Particulate Organic Nitrogen	µMol N	
Silicate	µMol Si	
Suspended Particulate Matter		tonnes/y
Total Inorganic Nitrogen		tonnes/y
Total Nitrogen	µMol N	tonnes/y
Total Nitrogen to Total Phosphorus ratio	molar ratio	
Total Organic Carbon	µMol C	tonnes/y
Total Organic Nitrogen	µMol N	
Total Oxidised Nitrogen	µMol N	
Total Phosphorus	µMol P	tonnes/y

Hazardous substances:

For concentrations of hazardous substances in biota and sediments, units are ng/kg, µg/kg or mg/kg. For concentrations in seawater, units are ng/l, µg/l or mg/l. The units currently used for determinands in the data tables are listed below.

CASNo	Determinand	Applied units			
		Biota	Sediment	Water	Loads
	1,1,1, Trichloroethane			ng/l	
	1,1,2,2,-Tetrachloroethane			ng/l	
	1,1,2-Trichloroethane			ng/l	
	1,1-Dichloroethane			ng/l	
	1,1-Dichloroethylene			ng/l	
	1,2,3,-Trichloropropane			ng/l	
120-82-1	1,2,4-trichlorobenzene			ng/l	
	1,2-Dibromomethane			ng/l	
107-06-2	1,2-Dichloroethane			ng/l	
	1,2-Dichloropropane			ng/l	
108-70-3	1,3,5-trichlorobenzene			ng/l	
	2,2',3,3',4,4',5 Heptachlorobiphenyl			ng/l	
35065-29-3	2,2',3,4,4',5,5'-heptachlorobiphenyl (CB180)	µg/kg	µg/kg	ng/l	
35065-28-2	2,2',3,4,4',5'-hexachlorobiphenyl (CB138)	µg/kg	µg/kg	ng/l	
35065-27-1	2,2',4,4',5,5'-hexachlorobiphenyl (CB153)	µg/kg	µg/kg	ng/l	
37680-73-2	2,2',4,5,5'-pentachlorobiphenyl (CB101)	µg/kg	µg/kg	ng/l	
35693-99-3	2,2',5,5'-tetrachlorobiphenyl (CB52)	µg/kg	µg/kg	ng/l	
	2,2',3,4',5',6 Hexachlorobiphenyl			ng/l	
38380-08-4	2,3,3',4,4',5-hexachlorobiphenyl (CB156)	µg/kg			
32598-14-4	2,3,3',4,4'-pentachlorobiphenyl (CB105)	µg/kg			
31508-00-6	2,3',4,4',5-pentachlorobiphenyl (CB118)	µg/kg	µg/kg	ng/l	
7012-37-5	2,4,4'-trichlorobiphenyl (CB28)	µg/kg	µg/kg	ng/l	
32774-16-6	3,3',4,4',5,5' HexCB (PCB169)	µg/kg			
32598-13-3	3,3',4,4'-tetrachlorobiphenyl (CB77)	µg/kg			
104-40-5	4-Nonylphenol			ng/l	
2051-24-3	5,5',6,6'-decachlorobiphenyl (CB209)	µg/kg			
83-32-9	Acenaphthene	µg/kg		ng/l	
208-96-8	Acenaphthylene	µg/kg			
	Adsorbable organic halogene				tonnes/y
15972-60-8	Alachlor			ng/l	
309-00-2	Aldrin	µg/kg	µg/kg	ng/l	
959-98-8	alpha-Endosulfan	µg/kg	µg/kg	ng/l	
319-84-6	alpha-HCH	µg/kg	µg/kg	ng/l	
7429-90-5	Aluminum and its compounds			ng/l	tonnes/y
120-12-7	Anthracene	µg/kg		ng/l	
7440-38-2	Arsenic and its compounds	µg/kg		µg/l	tonnes/y
1912-24-9	Atrazine			ng/l	
71-43-2	Benzene			ng/l	
56-55-3	Benzo[a]anthracene	µg/kg			
50-32-8	benzo-a-pyrene	µg/kg		ng/l	

CASNo	Determinand	Applied units			
		Biota	Sediment	Water	Loads
205-99-2	benzo-b-fluoranthene	µg/kg		ng/l	
	Benzo-e-pyrene	µg/kg			
191-24-2	benzo-g,h,i-perylene	µg/kg		ng/l	
207-08-9	benzo-k-fluoranthene	µg/kg		ng/l	
319-85-7	beta-HCH	µg/kg	µg/kg	ng/l	
	Bromodichloromethane			ng/l	
7440-43-9	Cadmium and its compounds	mg/kg	mg/kg	µg/l	kg/y
2921-88-2	Chlorpyrifos			ng/l	
7440-47-3	Chromium and its compounds	mg/kg	mg/kg	µg/l	kg/y
218-01-9	Chrysene	µg/kg			
7440-48-4	Cobalt and its compounds	mg/kg			tonnes/y
7440-50-8	Copper and its compounds	mg/kg	mg/kg	µg/l	kg/y
53-19-0	DDD, o, p'	µg/kg		µg/l	
72-54-8	DDD, p, p'	µg/kg	µg/kg	µg/l	
3424-82-6	DDE, o, p'			µg/l	
72-55-9	DDE, p, p'	µg/kg	µg/kg	µg/l	
789-02-6	DDT, o, p'	µg/kg	µg/kg	µg/l	
50-29-3	DDT, p, p'	µg/kg	µg/kg	µg/l	
319-86-8	delta-HCH			µg/l	
	Detergents				ktonnes/y
53-70-3	Dibenz[a,h]anthracene	µg/kg			
1002-53-5	Dibutyltin (DBT)	µg/kg			
75-09-2	Dichloromethane			ng/l	
62-73-7	Dichlorvos			ng/l	
60-57-1	Dieldrin	µg/kg	µg/kg	ng/l	
60-51-5	Dimethoate			ng/l	
330-54-1	Diuron			ng/l	
72-20-8	Endrin	µg/kg	µg/kg	ng/l	
86-73-7	Fluorene	µg/kg		ng/l	
206-44-0	Fluoroanthene	µg/kg		ng/l	
58-89-9	gamma-HCH	µg/kg	µg/kg	ng/l	
1024-57-3	Heptachlor epoxide			ng/l	
118-74-1	Hexachlorobenzene	µg/kg	µg/kg	ng/l	
87-68-3	Hexachlorobutadiene			ng/l	
608-73-1	Hexachlorocyclohexane			ng/l	
	Hydrocarbons				tonnes/y
193-39-5	indeno(1,2,3-cd) pyrene	µg/kg		ng/l	
7439-89-6	Iron and its compounds			µg/l	tonnes/y
465-73-6	Isodrin			ng/l	
34123-59-6	Isoproturon			ng/l	
7439-92-1	Lead and its compounds	mg/kg	mg/kg	µg/l	kg/y
330-55-2	Linuron			ng/l	
7439-96-5	Manganese and its compounds			µg/l	tonnes/y
7439-97-6	Mercury and its compounds	mg/kg	mg/kg	µg/l	kg/y
70776-03-3	Naphthalene, chloro derivs.	µg/kg			
7440-02-0	Nickel and its compounds	mg/kg	mg/kg	µg/l	kg/y

CASNo	Determinand	Applied units			
		Biota	Sediment	Water	Loads
	PAH (sum of 16 samples)	µg/kg			
140-66-9	para-tert-octylphenol			ng/l	
	PCB Congeners IUPAC Nos 28, 52, 101, 118, 138, 153, 180	µg/kg			
608-93-5	Pentachlorobenzene			ng/l	
87-86-5	Pentachlorophenol			ng/l	
85-01-8	Phenanthrene	µg/kg		ng/l	
64743-03-9	Phenols			ng/l	ktonnes/y
	Polyaromatic Hydrocarbons			ng/l	
1336-36-3	Polychlorinated biphenyls	µg/kg			
129-00-0	Pyrene	µg/kg		ng/l	
7782-49-2	Selenium and its compounds			µg/l	
122-34-9	Simazine			ng/l	
	Sum of (DDT (p,p'), DDE (p,p'), DDD (p,p'), DDT (o,p'), DDE (o,p'), DDD (o,p'))			ng/l	
	Sum PCB	µg/kg			
	Sum PCB7			ng/l	
	Tribromomethane			ng/l	
56573-85-4	Tributyltin	µg/kg		ng/l	
688-73-3	Tributyltin compounds	µg/kg		ng/l	
	Trichloroethylene			ng/l	
67-66-3	Trichloromethane			ng/l	
1582-09-8	Trifluralin			ng/l	
7440-62-2	Vanadium and its compounds	mg/kg		µg/l	tonnes/y
7440-66-6	Zinc and its compounds	mg/kg	mg/kg	µg/l	kg/y