Data Dictionary

Definition of

WISE-SoE Reporting: Lakes Water Quality
dataset

Version: July 2012

European Environment Agency

About this document

This document holds the technical specifications for a dataflow based on automatically generated output from the Data Dictionary application. The Data Dictionary is a central service for storing technical specifications for information requested in reporting obligations. The purpose of this document is to support countries in reporting good quality data. This document contains detailed specifications in a structured format for the data requested in a dataflow. Suggestions from users on how to improve the document are welcome.

Index

1. General information for WISE-SoE Reporting: Lakes Water Quality dataset

Basic metadata:

Short name	WISE-SoE: Lakes
Version	July 2012
Definition	Data on lakes are collected annually through the WISE-SoE data collection process. Data and information obtained through the process are primarily used to compile indicator factsheets, associated with the EEA's Core Set Indicators, upon which EEA assessment reports are based. Collected data are also published in Waterbase, a series of water topic-specific databases and web pages, publicly accessible via the EEA Data Service's web site. Data on the status and quantity of Europe's water resources can be viewed, analyzed and downloaded from Waterbase at:
	http://dataservice.eea.europa.eu/dataservice/available2.asp?type=findkeyword&theme=waterbase.
	Full details of the data requested on lakes are presented in this specification by table, and include the physical characteristics of the lake monitoring stations, proxy pressures on the upstream catchment areas, as well as chemical quality data on nutrients and organic matter, and hazardous substances in lakes.
Contact information	European Topic Centre on Inland, Coastal and Marine waters
	ETC/ICM
	Anita Künitzer
	Anita.Kuenitzer@cenia.cz
	icm.eionet.europa.eu
Planned updating frequency	Annual
Methodology for obtaining data	**
	Summary of changes in 2012
	**
	Table StationsLakes:
	Identifier of the field RBD code was changed from RBD-code to RBDcode to become identical with the Short name.
	Table NutrientsLakes_Agg:
	Methodology of the table was modified.
	Field Year: max. value was updated to 2011.
	Field AggregationPeriod: methodology was updated.
	Tables HazSubstLakes_Agg and HazSubstLakes_Disagg:
	Field Year: max. value was updated to 2011.
	Fields DeterminandHazSubsName and CASNumber: Codelist of hazardous substances was updated; 64 substances were added, together 97 substances were specified as Preferred SoE Hazardous substances for Lakes water quality reporting.
	Names of 5 hazardous substances available in the past were updated by expert:
	CAS: 12002-48-1 Trichlorobenzene -> Trichlorobenzenes
	CAS: 35694-08-7 PCB194 -> PCB194 (1,2,3,4-tetrachloro-5-(2,3,4,5-tetrachlorophenyl)benzene)
	CAS: 100-02-7 4-nitrophenol -> Nitrophenol
	CAS: 57465-28-8 3,3',4,4',5 pentachlorobiphenyl (CB126) -> PCB126 (1,2,3-trichloro-5-(3,4-dichlorophenyl)benzene)

CAS: 69782-90-7 2,3,3',4,4',5'-hexachlorobiphenyl (CB157) -> PCB157 (1,2,3-trichloro-5-(2,3,4-trichlorophenyl)benzene)

Table HazSubstLakes_SuppDet:

Field Year: max. value was updated to 2011.

Field Remarks was added.

Table BiologyLakes_Agg:

New table in Data dictionary for WISE-SoE Reporting: Lakes Water Quality.

Changes in comparison to the table BiologyLakes_Agg in Data dictionary for 2011 WISE-SoE Reporting: Biology in Rivers and Lakes:

Field MeanValue was removed, fields MeanValueOriginal, MeanValueEQR and MeanValueNormEQR were added instead.

Field DeterminandBiology: codelist was updated.

Field DeterminandStatusClass: definition and codelist were updated.

Table ClassificationSystemLakes:

New table in Data dictionary for WISE-SoE Reporting: Lakes Water Quality.

No changes in comparison to the table ClassificationSystemLakes in Data dictionary for 2011 WISE-SoE Reporting: Biology in Rivers and Lakes.

Codelists of Nutrients and Hazardous substances (incl. specification of preferred SoE Hazardous substances) together with the Potentially high values of Mean for selected Nutrients are available on the public section of Forum in Excel table format:

http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/wise-soe-reporting-2012/codelists-substances-water-quality-reporting

****

****

The data requested through the WISE-SoE data collection process should be derived from existing national and/or regional monitoring networks within each EEA Member Country. Member Countries are asked to provide data on nutrients and organic matter in lakes according to criteria described in the (Eurowaternet) technical guidelines (EEA Technical Report No. 7, 1998), and as detailed in this data request. Data on hazardous substances should be provided for all lakes. It is expected that these data should provide a general overview, based on truly comparable data, of water quality at a European level. The guidelines will be updated in the future to take into account the requirements of the Water Framework Directive and the EEA's need to develop data flows for biological and hydro-morphological quality elements.

Data processing rules described in the „EU Directive on technical specifications for chemical analysis and monitoring of water status 2009/90/EC" (see http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:201:0036:0038:EN:PDF)
should be followed.

Please consider the following when compiling your data delivery:

1. Submit chemical quality data up to and including 2011. Do not supply any data for 2012.

2. Submit data on nutrients and organic matter in lakes, based on criteria described in the technical guidelines and this data request, statistically aggregated to annual values.

3. When providing AGGREGATED data, sample concentrations below the limits of detection or quantification should be treated in a harmonized way: sample concentration values recorded as below the limit of detection or quantification should be replaced with a value equivalent to HALF THE LIMIT OF DETECTION OR QUANTIFICATION before aggregation.

4. When providing DISAGGREGATED data, sample concentrations below the limits of detection or quantification should be treated in a harmonized way: enter the limit of detection or quantification value itself into the Concentration field and fill the field LOD_LOQ_Flag with appropriate character ("[" or "<").

5. Negative concentration values should not be reported.

6. Selected hazardous substances are marked as "Preferred SoE Hazardous Substances" in the Hazardous Substances codelist. Please focus on these substances in your reporting above all.

7. Submit data on hazardous substances from all national lake monitoring stations in temporally disaggregated format. Single sample quantifications are required as many values will be below the limits of detection or quantification and this will provide a more robust assessment of how the data should be statistically treated and presented. Data will be aggregated by the ETC/ICM before being published in Waterbase or used as the basis of assessment in the indicator factsheets or reports. In cases where a determinand concentration at a monitoring site for each sampling occasion is represented by the averaged concentration from a number of sub-sites, then the additional relevant information should be reported in appropriate fields.

8. In case of disaggregated data reporting for certain substances, monitoring station and period, DO NOT report the aggregated data resulting from identical disaggregated data anymore. Such data redundancy is not taken into account. THE DISAGGREGATED DATA ARE ALWAYS PREFERRED.

9. Provide as long a time series of chemical quality data, for as many determinands and as many stations as possible. Fill in any gaps in existing data.

10. Modify and add to the information on the physical characteristics of the lakes. Longitude and Latitude values must be provided for every lake in decimal degrees format.

11. Include standard deviation values with the aggregated determinands where possible, in order to facilitate statistical analysis.

12. Upstream catchment pressure pressures should be provided for the upstream catchment of the lake itself rather than lake monitoring stations. If more than one monitoring station exists in the lake, the pressures should be the same for each station.

13. Use the templates (XML schemas, MS Excel or MS Access) and these specifications to guide you in formatting and collating your data delivery. All are available for download from the data dictionary.

14. Supply data in XML, MS Excel (preferred) or MS Access format. In the case of Excel format, xls files (= Excel 1997 – 2003) can be used only. Do not use xlsx files. Please do not use formulas in Excel template fields, fill values only. Ensure that dots (not commas) are used as decimal separators. For units containing the symbol "μ", make ensure that the proper "μ" character is used, and not symbol-font "m" (the formatting may be lost). In the case of MS Access format, it can be used for data delivery only in combination with XML or MS Excel format. The MS Access template has directly implemented functions for exporting data into these two formats.

15. Upload your data files to your nominated repository: the Central Data Repository at http://cdr.eionet.europa.eu or your national Eionet server.

The ETC/ICM contact persons for the WISE SoE: Lakes water quality reporting category are:
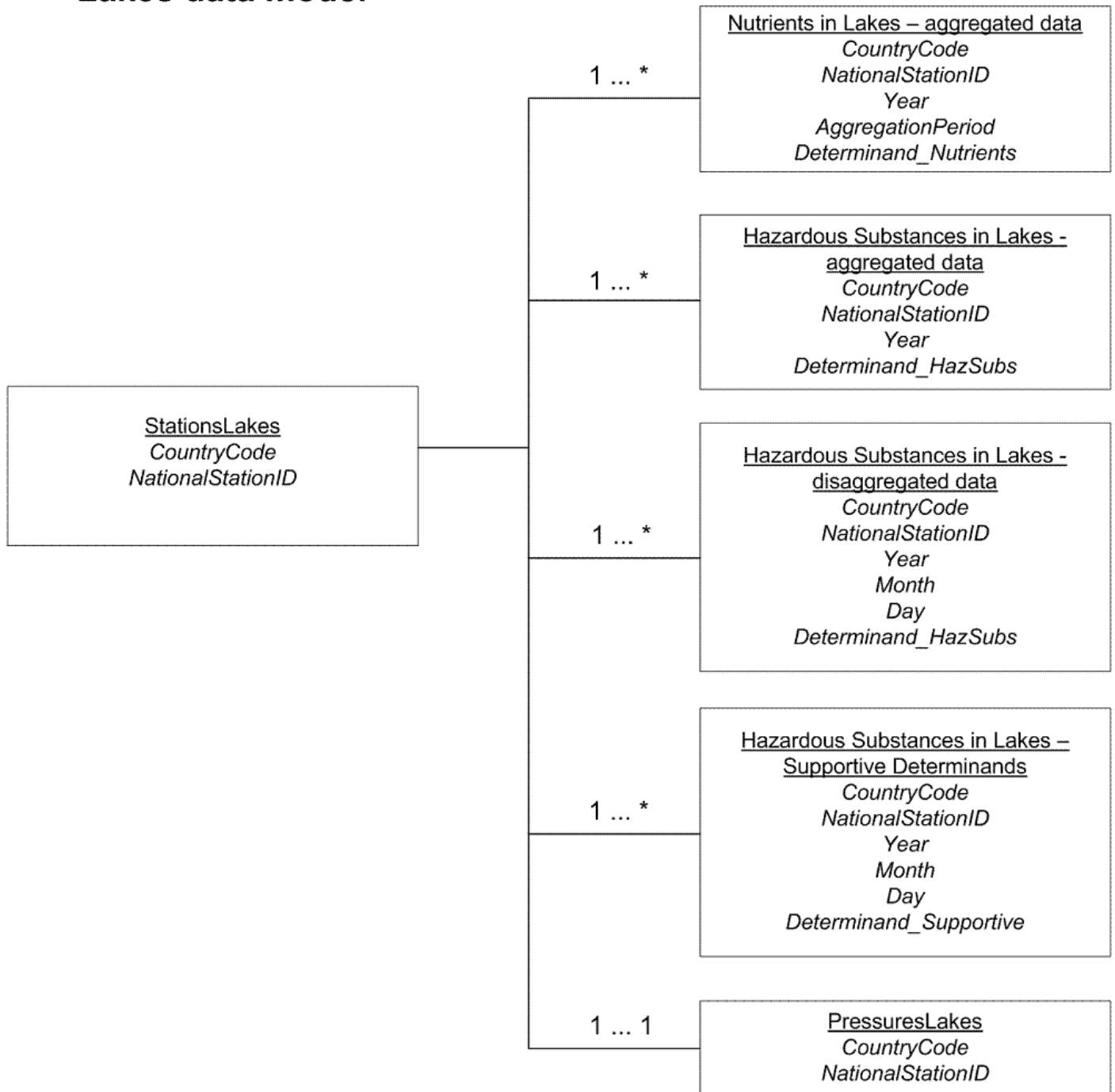
- István Bíró and Ferenc László, based at VITUKI, Environmental and Water Management Research Institute, Budapest, Hungary (biro.istvan@vituki.hu, laszlo.ferenc@vituki.hu) for water quality data and for general issues about the format and structure of requested dataset.

- Jannicke Moe based at the NIVA, Oslo, Norway (jannicke.moe@niva.no), for biological quality elements data.

2. Overview of WISE-SoE Reporting: Lakes Water Quality dataset tables

Name	Definition	Short description
Physical Characteristics of Lake Monitoring Stations	Detailed information on the physical characteristics of the lakes are requested from EEA Member Countries on an annual basis.	
Proxy Pressures of Lakes	Proxy pressures on the upstream catchments of the Eionet-Water lake monitoring stations, requested from EEA Member Countries on an annual basis.	
Nutrients, Organic Matter and General Physico-Chemical Determinands in Lakes - Aggregated Data	Chemical quality data on nutrients, organic matter and general physico-chemical determinands in lakes are requested from EEA Member Countries on an annual basis.	
Hazardous Substances and Other Chemical Determinands in Lakes - Aggregated Data	Chemical quality data on the concentrations of hazardous substances and other chemical determinands in lakes are requested from EEA Member Countries on an annual basis.	
Hazardous Substances and Other Chemical Determinands in Lakes - Disaggregated Data	Chemical quality data on the concentrations of hazardous substances and other chemical determinands in lakes are requested from EEA Member Countries on an annual basis.	
Hazardous Substances in Lakes - Supportive Determinands	Supportive determinands of hazardous substances in Lakes	Supportive determinands of hazardous substances in Lakes
Biology in Lakes - Aggregated data	Aggregated biological data from Lakes.	Aggregated biological data from Lakes.
Classification system for Ecological Status Classes in Lakes	Information on national classification system for each biological determinand and waterbody type, including reference conditions and boundaries of ecological status classes and ecological potential classes (for artificial and/or heavily modified waterbodies).	Classification system for Ecological Status Classes in Lakes

Datamodel for this dataset

.

WISE-SOE Reporting:
Lakes data model

StationsLakes
CountryCode
NationalStationID

1 ... *

Nutrients in Lakes – aggregated data
CountryCode
NationalStationID
Year
AggregationPeriod
Determinand_Nutrients

1 ... *

Hazardous Substances in Lakes - aggregated data
CountryCode
NationalStationID
Year
Determinand_HazSubs

1 ... *

Hazardous Substances in Lakes - disaggregated data
CountryCode
NationalStationID
Year
Month
Day
Determinand_HazSubs

1 ... *

Hazardous Substances in Lakes – Supportive Determinands
CountryCode
NationalStationID
Year
Month
Day
Determinand_Supportive

1 ... 1

PressuresLakes
CountryCode
NationalStationID

3. Tables

3.1 Physical Characteristics of Lake Monitoring Stations table

Short name	StationsLakes
Definition	Detailed information on the physical characteristics of the lakes are requested from EEA Member Countries on an annual basis.
Methodology for obtaining data	Many EEA Member Countries have previously submitted data on the physical characteristics of lakes. The physical characteristics, up to the last year of requested data, are available to be viewed and downloaded from the publicly accessible Waterbase, hosted by the EEA Data Service at:
	http://www.eea.europa.eu/data-and-maps/data/waterbase-lakes-7
	Data providers are asked to check and validate the published data, and include any amendments or missing information in the next delivery of data. In particular, provide details of the type of lake monitoring station.
	The following fields combine to create a unique record in this table: CountryCode and NationalStationID. No duplicate records should exist within this combination.
	Multiple choice from the codelist is allowed for the field Geology. Use comma as a delimiter.
	We would like to encourage all countries to provide data on the physical characteristics of the lake monitoring stations, ensuring that Longitude and Latitude values are provided for every station and are in decimal degrees format.

Columns in **Physical Characteristics of Lake Monitoring Stations** table:

	Column name	Column definition	Methodology	Data specifications
3.1.1	**Country Code** (CountryCode)	Abbreviation of EEA Member or Collaborating Country, as defined in the codelist.	This is a required, not null field. ISO 3166-alpha-2 code elements.	string codelist: see section 4

	Column name	Column definition	Methodology	Data specifications
3.1.2	**National Station ID** (NationalStationID)	Identifier of the river or lake monitoring station, the water quantity station, the TCM flux station or monitoring station, all unique at the national level. A TCM station should be a geographically fixed location, an area in which actual sampling locations vary from survey to survey or an area with a defined salinity range within which samples have been taken. Each station must be referred to by its single, central location. Supplementary information can be included in the Remarks field.	This is a required, not null field. The NationalStationID must be a unique identifier at the national level and must contain no duplicate values. It should be the same ID as supplied in previous updates unless the ID numbering system has changed, in which case a full resupply of all data should be provided using the new ID. For TCM flux stations, the NationalStationID should be the same as that provided for the river flux station.	Datatype: string Minimum size: 1 Maximum size: 255
3.1.3	**National Station Name** (NationalStationName)	National name of the monitoring station.	Use UTF-8 codelist in case non-ascii characters occur.	Datatype: string Minimum size: 0 Maximum size: 255
3.1.4	**WFD station** (WFDstation)	Specification yes / no, whether the monitoring station was reported to European Commission as Water Framework Directive, Article 8 monitoring station.		string codelist: see section 4
3.1.5	**WFD Station Code** (WFD_EU_CD)	Internally produced, unique international identifier of the monitoring station under which the station was reported as WFD Art.8 monitoring station.	Keep blank if WFD station = no. Based on ISO 3166-alpha-2 country code elements, concatenated with the nationally assigned unique identifier of the monitoring station (e.g. ATKK30500752, DE_GM_BB_30370060).	Datatype: string Minimum size: 3 Maximum size: 64
3.1.6	**Name of Lake** (LakeName)	Name of Lake		Datatype: string Minimum size: 0 Maximum size: 255
3.1.7	**Water Category** (WaterCategory)	Water Category, as defined in the codelist.	This is a required, not null field.	string codelist: see section 4

	Column name	Column definition	Methodology	Data specifications
3.1.8	**Water Body ID** (WaterBodyID)	National identification code of water body (if available) in which station is located.	This is a required, not null field for EU countries. Water body as required/defined by the WFD. A water body may have more than one station in it.	Datatype: string Minimum size: 0 Maximum size: 255
3.1.9	**Water Body Name** (WaterBodyName)	Name of water body in which station is located.	Water body as required/defined by the WFD. A water body may have more than one station in it.	Datatype: string Minimum size: 0 Maximum size: 255
3.1.10	**Catchment Name** (CatchmentName)	Name of major catchment or basin.	Recommendation: A catchment of "main river" as member states defined in Water Framework Directive, Article 5 report.	Datatype: string Minimum size: 0 Maximum size: 255
3.1.11	**River Basin District Code** (RBDcode)	River Basin District Code, as defined in the codelist.	This is a required, not null field, if appropriate RBD code is specified in the codelist.	string codelist: see section 4
3.1.12	**River Basin District Name** (RBDname)	Name of the River Basin District.	This is a required, not null field, if appropriate RBD code is NOT specified in the codelist. Keep blank if the field River Basin District Code is filled. Please enter RBD name in case RBD of processed area / locality is not included in the codelist of River Basin District Code field.	Datatype: string Minimum size: 0 Maximum size: 255
3.1.13	**Region** (Region)	National region in which water body is located.	Recommendation: A region NUTS 3 level.	Datatype: string Minimum size: 0 Maximum size: 255

	Column name	Column definition	Methodology	Data specifications
3.1.14	**Longitude** (Longitude)	(X) International geographical co-ordinates in decimal degrees format.	This is a required, not null field. Use the common geodetic datum ETRS89. WGS84 should be used for overseas areas and can be used for TCM data as well. Use negative values for coordinates west of the Greenwich Meridian (0°). Please round the coordinates to 4 - 5 decimal places, depending on your input data precision (0.0001° = about 10 m). Where TCM stations represent a broader area, the central location of the area should be provided.	Datatype: decimal Maximum size: 12 Minimum inclusive value: -180 Maximum inclusive value: 180 Decimal precision: 7 Unit: decimal degrees
3.1.15	**Latitude** (Latitude)	(Y) International geographical co-ordinates in decimal degrees format.	This is a required, not null field. Use the common geodetic datum ETRS89. WGS84 should be used for overseas areas and can be used for TCM data as well. Use negative values for coordinates south of the Equator (0°). Please round the coordinates to 4 - 5 decimal places, depending on your input data precision (0.0001° = about 10 m). Where TCM stations represent a broader area, the central location of the area should be provided.	Datatype: decimal Maximum size: 12 Minimum inclusive value: -90 Maximum inclusive value: 90 Decimal precision: 7
3.1.16	**Catchment Area** (CatchmentArea)	Catchment area upstream of the station, in kilometres squared.	For lakes, the catchment area upstream of the lake should be provided. If more than one station exists in the lake, the catchment area value should be same for all stations.	Datatype: float Minimum inclusive value: 0 Unit: km2

	Column name	Column definition	Methodology	Data specifications
3.1.17	**Altitude** (Altitude)	Altitude of river or lake monitoring station in metres above sea level.	For rivers and lakes, the altitude of the monitoring station should be provided.	Datatype: integer Maximum size: 4 Minimum inclusive value: 0 Maximum inclusive value: 5000 Unit: m

	Column name	Column definition	Methodology	Data specifications

3.1.18	**Representative Station** (RepresentativeStation)	Representative station type, reflecting the general quality of rivers, lakes, transitional or coastal water bodies or marine water areas.	Provide data as text Y or N.
			
			The proposed criteria for the selection of representative monitoring sites are given in the Final SoE Reporting Guidance: http://eea.eionet.europa.eu/Members/irc/eionet-circle/water/library?l=/reporting_eionetwfd/guidance_2009pdf/_EN_1.0_&a=d on page 50, chapter 2.5 "Surface Waters: Criteria for the monitoring sites to be used for EEA/SoE assessments" and on page 132, chapter 5.1.1 "Representativity and Geo-statistics":
			
			  Sites from all water categories: rivers, lakes, transitional, coastal and marine waters
			
			  Including representative examples of all types: different types of water bodyin a catchment would reflect, for example, differences in the hydrological regime, altitude, geology, depth and sizes of the rivers, lakes, transitional and coastal waters
			
			  Including representative examples from the cmplete range of statuses present within each catchment
			
			  Including examples of sites monitored in different sizes of water body: ideally there would be some sites in, and representative of, small water bodies as well as on the largest water bodies. This would enable the identification and assesment of comparable types of water body
			
			  Including sites representative of all types of pressure present in the catchments of the River Basin District
				boolean codelist: see section 4

	Column name	Column definition	Methodology	Data specifications
			River and lake stations can be of more than one type.	
3.1.19	**Reference Station** (ReferenceStation)	Reference station type, found in catchments or associated River Basin Districts with little or no human activity, natural landscape higher than 90%, and minimally impacted by inflow from adjacent coastal or marine waters.	Provide data as text Y or N. Concentrations of nutrients or hazardous substances occurring naturally would give an indication of background levels. For volatile synthetic substances, data from these stations might be used to assess the significance of atmospheric deposition. River and lake stations can be of more than one type.	boolean codelist: see section 4
3.1.20	**Impact Station** (ImpactStation)	Impact station type, located within the zone where initial mixing of discharges takes place with receiving waters.	Provide data as text Y or N. Concentrations may be worst-case. Impact stations may be used to assess the compliance of discharges with standards established for hazardous substances and may be included in operational monitoring programmes as required by the WFD. Data are not required from investigative monitoring stations. River and lake stations can be of more than one type.	boolean codelist: see section 4
3.1.21	**Largest Station** (LargestStation)	Largest, most important station type, including the nationally most important or well known rivers or lakes.	Provide data as text Y or N. Some stations are likely to be monitored for the EU Exchange of Information Decision. River and lake stations can be of more than one type.	boolean codelist: see section 4
3.1.22	**Geology** (Geology)	The dominating geology in the catchment, given according to the WFD Annex 2 categories: Siliceous, calcareous or organic (peat).	Geological maps of the catchment. Multiple choice from codelist is allowed. Use comma as a delimiter.	string codelist: see section 4

	Column name	Column definition	Methodology	Data specifications
3.1.23	**Water colour long-term average concentration** (WaterColourAverage)	Long-term average concentration of water colour, expressing the concentration of humic substances at the station.	Measured with spectrophotometric analyses of absorbance, or with colour comparator.	Datatype: float Unit: mg/l Pt
3.1.24	**Water colour average level** (WaterColourLevel)	Average level of water colour as defined by the WFD intercalibration typology: Low (<30 mg/l Pt = oligohumic), moderate (30-90 mg/l Pt = mesohumic) or high (>90 mg/l Pt = polyhumic).	Select level from codelist. If no quantitative data exists, the level of water colour can be estimated from historical records or from catchment geology (% bogs, wetlands and forests).	string codelist: see section 4
3.1.25	**Alkalinity long-term average** (AlkalinityAverage)	Long-term average of alkalinity of water at the station	Titration, long-term dataset	Datatype: float Unit: meq/l
3.1.26	**Alkalinity average level** (AlkalinityLevel)	Long-term average level of alkalinity as defined by the WFD intercalibration typology: Low alk. (<0.2 meq/L), moderate alk. (0.2-1 meq/L) or high alk. (>1 meq/L).	Using historical alkalinity data or catchment geology (% calcareous bedrock or deposits in catchment) to estimate level of long-term alkalinity at the station.	string codelist: see section 4
3.1.27	**Heavily modified water body** (HMWB)	Lake is identified as heavily modified in terms of hydromorphological impacts, such as impoundments and high water level fluctuations, according to WFD-compliant national guidelines	Provide data as text Y or N.	boolean codelist: see section 4
3.1.28	**Artificial water body** (ArtificialWB)	Station is located in an artificial water body, (e.g. artificial water reservoir) in terms of hydromorphological impacts, such as impoundments and high water level fluctuations, according to WFD- compliant national guidelines.	Provide data as text Y or N.	boolean codelist: see section 4
3.1.29	**Purpose of monitoring station** (Purpose)	The purpose of the monitoring station in terms of to which directives, conventions or agreements will the data from the station be used for reporting.	Please give information of which directives, conventions or agreements the station is used for.	Datatype: string Minimum size: 0 Maximum size: 255
3.1.30	**Location** (Location)	Location of the lake monitoring site (e.g. main outlet of lake, centre of lake, etc.)		Datatype: string Minimum size: 0 Maximum size: 255
3.1.31	**Surface Area** (SurfaceArea)	Surface area of lake in square kilometres.	Mean value if the surface area is seasonally changing.	Datatype: float Minimum inclusive value: 0 Unit: km2
3.1.32	**Mean Depth** (MeanDepth)	Mean depth of the lake in metres.	Mean value if the depth is seasonally changing.	Datatype: float Minimum inclusive value: 0 Unit: m

	Column name	Column definition	Methodology	Data specifications
3.1.33	**Maximum Depth** (MaximumDepth)	Maximum depth of the lake in metres.	Mean value if the depth is seasonally changing.	Datatype: float Minimum inclusive value: 0 Unit: m
3.1.34	**Residence Time** (ResidenceTime)	Average lake residence time in years.	Calculated as volume/annual flow.	Datatype: float Minimum inclusive value: 0 Unit: years
3.1.35	**Lake Volume** (Volume)	Volume of water in lake in million cubic metres.	Mean value if the lake volume is seasonally changing.	Datatype: float Minimum inclusive value: 0 Unit: million m3
3.1.36	**Reservoir** (Reservoir)	Reservoir or natural lake.	Provide data as text Y (reservoir) or N (natural lake).	boolean codelist
3.1.37	**Sampling Depth** (SamplingDepth)	Depth at which sample taken in metres below the water surface.	Data can be provided in ranges if more than one sample is taken from different depths. Indicate all sampling depths. Supply in numerical order in format x-y-..-z (e.g. 1-2-5-10 if samples taken at 1, 2, 5 and 10 m depths).	Datatype: string Minimum size: 0 Maximum size: 20
3.1.38	**Remarks** (Remarks)	Remarks, comments or explanatory notes (free text).	Rivers, Lakes, Groundwater quality - concentration data tables: Enter the text "value confirmed" in the case you are sure the value exceeding the Potentially high value is correct. Lists of these high values for selected substances are available on the Forum folder: http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/wise-soe-reporting-2012/codelists-substances-water-quality-reporting	Datatype: string Minimum size: 0 Maximum size: 255

3.2 Proxy Pressures of Lakes table

Short name	PressuresLakes
Definition	Proxy pressures on the upstream catchments of the Eionet-Water lake monitoring stations, requested from EEA Member Countries on an annual basis.
Methodology for obtaining data	Many EEA Member Countries have previously submitted data on the proxy pressures on the upstream catchments of lakes. The proxy pressure data, up to the last year of requested data, are available to be viewed and downloaded from the publicly accessible Waterbase, hosted by the EEA Data Service at: http://www.eea.europa.eu/data-and-maps/data/waterbase-lakes-7 Data providers are asked to check and validate the published data, and include any amendments or missing information in the next delivery of data. Further information on Corine Land Cover can be found on the EEA's web site in the Reports section at: http://reports.eea.europa.eu/search_results?SearchTitle=corine+land+cover and the EEA Data Service at: http://www.eea.europa.eu/data-and-maps/data#c5=all&b_start=0&c9=clc2000&c11=landuse The following fields combine to create a unique record in this table: CountryCode and NationalStationID. No duplicate records should exist within this combination. We would like to encourage all countries to provide data on the proxy pressures on the upstream catchment of the lake monitoring stations, for as many stations as possible.

Columns in **Proxy Pressures of Lakes** table:

	Column name	Column definition	Methodology	Data specifications
3.2.1	**Country Code** (CountryCode)	Abbreviation of EEA Member or Collaborating Country, as defined in the codelist.	This is a required, not null field. ISO 3166-alpha-2 code elements.	string codelist: see section 4

	Column name	Column definition	Methodology	Data specifications
3.2.2	**National Station ID** (NationalStationID)	Identifier of the river or lake monitoring station, the water quantity station, the TCM flux station or monitoring station, all unique at the national level. A TCM station should be a geographically fixed location, an area in which actual sampling locations vary from survey to survey or an area with a defined salinity range within which samples have been taken. Each station must be referred to by its single, central location. Supplementary information can be included in the Remarks field.	This is a required, not null field. The NationalStationID must be a unique identifier at the national level and must contain no duplicate values. It should be the same ID as supplied in previous updates unless the ID numbering system has changed, in which case a full resupply of all data should be provided using the new ID. For TCM flux stations, the NationalStationID should be the same as that provided for the river flux station.	Datatype: string Minimum size: 1 Maximum size: 255
3.2.3	**Population Density** (PopulationDensity)	Population density of the upstream catchment of the river monitoring station or lake, the upstream catchment or drainage basin of the transitional water (TCM data set), or the area within the River Basin District to which the coastal water has been assigned (TCM data set), in capita per kilometre squared.		Datatype: float Minimum inclusive value: 0 Unit: capita/km2
3.2.4	**Urban waste water treatment discharges** (UWWT)	Point source pressure from urban waste water treatment discharges.	Provide data as text Y or N. Is the station subject to pressures from UWWT discharges?	boolean codelist: see section 4
3.2.5	**Storm overflows and urban discharges** (OverflowsDischarges)	Point source pressure from overflows and urban discharges.	Provide data as text Y or N. Is the station subject to pressures from storm overflows and urban discharges?	boolean codelist: see section 4
3.2.6	**Integrated Pollution Prevention and Control Installation** (IPPC)	Point source pressure from IPPC installations.	Provide data as text Y or N. Is the station subject to pressure from IPPC installations?	boolean codelist: see section 4
3.2.7	**Non-Integrated Pollution Prevention and Control Installation** (nonIPPC)	Point source pressure from non-IPPC installations?	Provide data as text Y or N. Is the station subject to pressure from non-IPPC installations?	boolean codelist: see section 4

	Column name	Column definition	Methodology	Data specifications
3.2.8	**Fertiliser use** (Fertiliser)	Diffuse sources pressures from agricultural fertiliser use.	Provide data as text Y or N. Is the station subject to pressures from fertiliser use?	boolean codelist: see section 4
3.2.9	**Pesticide use** (Pesticide)	Diffuse sources pressures from agricultural pesticide use.	Provide data as text Y or N. Is the station subject to pressures from pesticide use?	boolean codelist: see section 4
3.2.10	**Livestock** (Livestock)	Diffuse sources pressures from agricultural livestock.	Provide data as text Y or N. Is the station subject to pressures from livestock?	boolean codelist: see section 4
3.2.11	**Transport and infrastructure** (TransportInfrastructure)	Diffuse sources pressures from transport and infrastructure without connection to sewers.	Provide data as text Y or N. Is the station subject to pressures from transport and infrastructure?	boolean codelist: see section 4
3.2.12	**Water abstraction for public water supply** (PublicWaterSupply)	Water abstractions pressures due to public water supply.	Provide data as text Y or N. Is the station subject to water abstraction pressures due to public water supply?	boolean codelist: see section 4
3.2.13	**Water abstraction for industry** (Industry)	Water abstractions pressures due to industry.	Provide data as text Y or N. Is the station subject to water abstraction pressures due to industry?	boolean codelist: see section 4
3.2.14	**Water abstraction for irrigation** (Irrigation)	Water abstractions pressures due to irrigation.	Provide data as text Y or N. Is the station subject to water abstraction pressures due to irrigation?	boolean codelist: see section 4
3.2.15	**Water abstraction for cooling** (Cooling)	Water abstractions pressures due to needs for cooling water, e.g. for nuclear power plants or other industrial activities.	Provide data as text Y or N. Is the station subject to water abstraction pressures due to need for cooling water?	boolean codelist: see section 4
3.2.16	**Water flow regulation and morphological alterations** (WaterFlowRegulation)	Water flow regulation and morphological alterations	Is the station subject to pressures due to water flow regulation or morphological alterantions? Activity type can be e.g. agriculture, navigation, hydropower, or other (please specify).	Datatype: string Minimum size: 0 Maximum size: 255

	Column name	Column definition	Methodology	Data specifications
3.2.17	**Remarks** (Remarks)	Remarks, comments or explanatory notes (free text).	Rivers, Lakes, Groundwater quality - concentration data tables: Enter the text "value confirmed" in the case you are sure the value exceeding the Potentially high value is correct. Lists of these high values for selected substances are available on the Forum folder: http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/wise-soe-reporting-2012/codelists-substances-water-quality-reporting	Datatype: string Minimum size: 0 Maximum size: 255

3.3 Nutrients, Organic Matter and General Physico-Chemical Determinands in Lakes - Aggregated Data table

Short name	NutrientsLakes_Agg
Definition	Chemical quality data on nutrients, organic matter and general physico-chemical determinands in lakes are requested from EEA Member Countries on an annual basis.
Methodology for obtaining data	Many EEA Member Countries have previously submitted aggregated data on nutrients, organic matter and general physico-chemical determinands in lakes. The chemical quality data, up to the last year of requested data, are available to be viewed and downloaded from the publicly accessible Waterbase, hosted by the EEA Data Service at: http://www.eea.europa.eu/data-and-maps/data/waterbase-lakes-6 Data providers are asked to check and validate the published data, and include any amendments in the next delivery of data. The determinands required are detailed in the codelist attached to the Determinand_Nutrients field. In the case the units of concentrations used in your datasets are different from the requested units or you need to recalculate the concentration of sampled compounds to the concentration of elements (e.g. concentration of Ammonium to concentration of Nitrogen etc.), please use conversion factors available on the following web page: http://taskman.eionet.europa.eu/ETCW/wiki/Data_Handling/QA_basic_test#valid_codes Data on nutrients, organic matter and general physico-chemical determinands are requested as annually aggregated values (reported in the field "Mean"). Information relevant for the temporal aggregation should be reported in appropriate fields: method of aggregation (such as average), number of samples, and aggregation period, and additional summary statistics (median, standard deviation, minimum and maximum). In cases where a determinand concentration at a monitoring site for each sampling occasion is represented by the averaged concentration from a number of sub-sites, then additional information on spatial aggregation should be reported in the fields MethodOfAggregation and NoOfSubsites (see each field for more detailed methodology). On aggregation, sample concentration values recorded as below the limit of detection or determination should be replaced with a value equivalent to half the limit of detection or determination, with the value of the limit of detection or determination noted in the appropriate fields. Negative values should not be used to represent values below the limit of detection or determination. The following fields combine to create a unique record in this table: CountryCode, NationalStationID, Year, AggregationPeriod, Determinand_Nutrients and SampleDepth. No duplicate records should exist within this combination. We would like to encourage all countries to provide data on nutrients and organic matter in lakes, for as many stations, for as many determinands and for as long a time series as possible.

Columns in **Nutrients, Organic Matter and General Physico-Chemical Determinands in Lakes - Aggregated Data** table:

	Column name	Column definition	Methodology	Data specifications
3.3.1	**Country Code** (CountryCode)	Abbreviation of EEA Member or Collaborating Country, as defined in the codelist.	This is a required, not null field. ISO 3166-alpha-2 code elements.	string codelist: see section 4
3.3.2	**National Station ID** (NationalStationID)	Identifier of the river or lake monitoring station, the water quantity station, the TCM flux station or monitoring station, all unique at the national level. A TCM station should be a geographically fixed location, an area in which actual sampling locations vary from survey to survey or an area with a defined salinity range within which samples have been taken. Each station must be referred to by its single, central location. Supplementary information can be included in the Remarks field.	This is a required, not null field. The NationalStationID must be a unique identifier at the national level and must contain no duplicate values. It should be the same ID as supplied in previous updates unless the ID numbering system has changed, in which case a full resupply of all data should be provided using the new ID. For TCM flux stations, the NationalStationID should be the same as that provided for the river flux station.	Datatype: string Minimum size: 1 Maximum size: 255
3.3.3	**Year** (Year)	Year of aggregation period (aggregated data sets) or year in which sample taken (disaggregated data sets), in format YYYY.	This is a required, not null field. Year should be no later than that requested in the latest data request.	Datatype: integer Maximum size: 4 Minimum inclusive value: 1800 Maximum inclusive value: 2011
3.3.4	**Aggregation Period** (AggregationPeriod)	Period of aggregation, as defined in the codelist.	This is a required, not null field. Data are requested, preferably, as annually aggregated mean values. AggregationPeriod for a station should be consistent from year to year, otherwise the time series from this station will be broken, and data from this station may have to be excluded from trend analyses. For rivers and lakes, AggregationPeriod "Annual" should therefore be used even if the station is not sampled throughout the whole year. For lakes, data can also be aggregated by alternative aggregation periods in addition to Annual (see the list of allowable values) and reported as additional records, if wanted.	string codelist: see section 4

	Column name	Column definition	Methodology	Data specifications
3.3.5	**Aggregation Period - Specification by Months** (AggregationMonths)	Additional information - detailed specification of aggregation period by months. Should be used especially in case the reported period of aggregation is different from any value of AggregationPeriod column codelist.	Enter the succession or range of months, using the order of months within the year (e.g.: 05,06,07 or 04-10).	Datatype: string Minimum size: 0 Maximum size: 128
3.3.6	**Aggregation Period - Length in Months** (AggregationLength)	Number of months in aggregation period.		Datatype: integer Maximum size: 2 Minimum inclusive value: 1 Maximum inclusive value: 12
3.3.7	**Name of Nutrients Determinand** (Determinand_Nutrients)	Name of nutrients, organic matter or general physico-chemical determinands, as defined in the codelist.	This is a required, not null field. The codelist contains all determinands relating to nutrients, organic matter or general physico-chemical determinands. Data should be provided where available and applicable.	Datatype: string Minimum size: 1 Maximum size: 255
3.3.8	**Unit of Measurement of Nutrients** (Unit_Nutrients)	Unit of measurement of nutrients or organic matter, as defined in the codelist.	This is a required, not null field. Units of measurement expressed per litre in rivers and lakes.	Datatype: string Minimum size: 1 Maximum size: 20
3.3.9	**CEN/ISO** (CEN/ISO)	CEN/ISO code of the methods	See the CEN/ISO code list for suggested values. If the method used is not found in the code list, please provide a brief description.	Datatype: string Minimum size: 0 Maximum size: 255
3.3.10	**Number of Samples** (NumberOfSamples)	Number of samples included in aggregated data.	This is a required, not null field.	Datatype: integer Maximum size: 4 Minimum inclusive value: 1
3.3.11	**Limit of Detection** (LimitOfDetection)	Concentration for which there is a desirably small probability (around 5%) that the determinand will not be detected i.e. there is a 95% probability that the determinand will be detected.	Aggregated data reporting: In case of using different limits within the aggregation period, please enter the highest value.	Datatype: float

	Column name	Column definition	Methodology	Data specifications
3.3.12	**Limit of Quantification** (LimitOfQuantification)	The smallest concentration that can be distinguished from the analytical blank at a chosen level of statistical confidence (usually 95%).	Hazardous substances: Required, not null field. Nutrients: Voluntary field Aggregated data reporting: In case of using different limits within the aggregation period, please enter the highest value.	Datatype: float
3.3.13	**Minimum** (Minimum)	Minimum disaggregated sample concentration value of the input data used for aggregation.	On aggregation, sample concentration values recorded as below the limit of detection or quantification should be replaced with a value equivalent to half the limit of detection or quantification.	Datatype: float Minimum inclusive value: 0
3.3.14	**Mean** (Mean)	Mean concentration value of aggregated data.	This is a required, not null field. On aggregation, sample concentration values recorded as below the limit of detection or quantification should be replaced with a value equivalent to half the limit of detection or quantification.	Datatype: float Minimum inclusive value: 0
3.3.15	**Maximum** (Maximum)	Maximum disaggregated sample concentration value of the input data used for aggregation.	On aggregation, sample concentration values recorded as below the limit of detection or quantification should be replaced with a value equivalent to half the limit of detection or quantification.	Datatype: float Minimum inclusive value: 0
3.3.16	**Median** (Median)	Median concentration value of aggregated data.	On aggregation, sample concentration values recorded as below the limit of detection or quantification should be replaced with a value equivalent to half the limit of detection or quantification.	Datatype: float Minimum inclusive value: 0
3.3.17	**Standard Deviation** (StandardDeviation)	Standard deviation of concentration values of aggregated data.	On aggregation, sample concentration values recorded as below the limit of detection or quantification should be replaced with a value equivalent to half the limit of detection or quantification.	Datatype: float Minimum inclusive value: 0

	Column name	Column definition	Methodology	Data specifications
3.3.18	**Sample Depth** (SampleDepth)	Depth at which sample taken in metres below water surface. Rivers, Lakes: In case of aggregated data please provide average sample depth. TCM: In case of an integrated sample provide the upper depth of the sample.	TCM: This is a required, not null field. If reporting an integrated sample from e.g. 0-10 m enter the upper depth of the integrated sample here (in this example 0). Rivers, Lakes: This field is required for distinct measurements. For surface concentrations, enter value 0. The measurements from different depths can be reported as separate samples; if so please report the sample depth for each measurement. If the measurement from different samples are aggregated into one value, please describe the depth range and aggregation method in the field "Method of Subsites Spatial Aggregation".	Datatype: float Minimum inclusive value: 0 Unit: m
3.3.19	**Total depth of water column** (TotalDepth)	Total depth of water column at the sampling location and at the time of sampling (meters).		Datatype: float Minimum inclusive value: 0 Maximum inclusive value: 9999.99 Unit: m
3.3.20	**Number of subsites** (NoOfSubsites)	Number of subsites.		Datatype: integer Maximum size: 3 Minimum inclusive value: 1 Maximum inclusive value: 100
3.3.21	**Method of Subsites Spatial Aggregation** (MethodSubsitesSpatialAggreg)	Method of Subsites Spatial Aggregation field is used only if the data are spatially aggregated (No. of subsites > 1), e.g. several subsites across the river profile or across lake depth profile are joined to one monitoring station.	State that the data are spatially averaged and specify if they are depth-averaged (lakes only) or width-averaged (rivers only). Please note that all supportive determinands (pH, temperature, etc.) for aggregated data should be aggregated in the same way as reported here.	Datatype: string Minimum size: 0 Maximum size: 255

	Column name	Column definition	Methodology	Data specifications
3.3.22	**Remarks** (Remarks)	Remarks, comments or explanatory notes (free text).	Rivers, Lakes, Groundwater quality - concentration data tables: Enter the text "value confirmed" in the case you are sure the value exceeding the Potentially high value is correct. Lists of these high values for selected substances are available on the Forum folder: http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/wise-soe-reporting-2012/codelists-substances-water-quality-reporting	Datatype: string Minimum size: 0 Maximum size: 255

3.4 Hazardous Substances and Other Chemical Determinands in Lakes - Aggregated Data table

Short name	HazSubstLakes_Agg
Definition	Chemical quality data on the concentrations of hazardous substances and other chemical determinands in lakes are requested from EEA Member Countries on an annual basis.
Methodology for obtaining data	Comparable and harmonised data are requested on the concentrations and distribution of hazardous substances and other chemical determinands in all lakes. The focus is on pesticides and other Preferred SoE Hazardous Substances marked in the codelist attached to the CASnumber field. Reporting of any other monitored polutants is welcomed. Countries are asked to provide the Name and CAS Number in case of reporting any additional determinands missing in the codelist.

Countries are also asked to provide a description of the analytical method, preferable as a CEN/ISO code (if available).

The preferred option for data on hazardous substances and other chemical determinands is disaggregated, individual sample data for each monitoring site - see table "Hazardous Substances and Other Chemical Determinands in Lakes - Disaggregated Data".

In case disaggregated data can not be reported, please use this Aggregated Data Table to report data aggregated per determinand, monitoring station and year. On aggregation, sample concentration values recorded as below the limit of detection or limit of quantification should be replaced with a value equivalent to half the limit of detection or quantification.

In cases where a determinand concentration at a monitoring site for each sampling occasion is represented by the averaged concentration from a number of sub-sites, then additional information relevant for the spatial data aggregation should be reported in appropriate fields: Method of Subsites Spatial Aggregation and Number of Subsites. |

Columns in **Hazardous Substances and Other Chemical Determinands in Lakes - Aggregated Data** table:

	Column name	Column definition	Methodology	Data specifications
3.4.1	**Country Code** (CountryCode)	Abbreviation of EEA Member or Collaborating Country, as defined in the codelist.	This is a required, not null field.

ISO 3166-alpha-2 code elements. | string codelist: see section 4 |

	Column name	Column definition	Methodology	Data specifications
3.4.2	**National Station ID** (NationalStationID)	Identifier of the river or lake monitoring station, the water quantity station, the TCM flux station or monitoring station, all unique at the national level. A TCM station should be a geographically fixed location, an area in which actual sampling locations vary from survey to survey or an area with a defined salinity range within which samples have been taken. Each station must be referred to by its single, central location. Supplementary information can be included in the Remarks field.	This is a required, not null field. The NationalStationID must be a unique identifier at the national level and must contain no duplicate values. It should be the same ID as supplied in previous updates unless the ID numbering system has changed, in which case a full resupply of all data should be provided using the new ID. For TCM flux stations, the NationalStationID should be the same as that provided for the river flux station.	Datatype: string Minimum size: 1 Maximum size: 255
3.4.3	**Year** (Year)	Year of aggregation period (aggregated data sets) or year in which sample taken (disaggregated data sets), in format YYYY.	This is a required, not null field. Year should be no later than that requested in the latest data request.	Datatype: integer Maximum size: 4 Minimum inclusive value: 1800 Maximum inclusive value: 2011
3.4.4	**Hazardous Substance Determinand Name** (DeterminandHazSubsName)	Name of hazardous substance or other chemical determinand, as defined in codelist.	This is a required, not null field. Rivers, Lakes, TCM: Use codelist embedded to the Chemical Abstract Service Number (CASNumber) field, column Definition. Emissions: Use codelist embedded to the Hazardous Substances Determinand ID field, column Short Description. Data could also be provided for any other hazardous substances which are not defined in codelist. Use ASCII characters only.	Datatype: string Minimum size: 0 Maximum size: 255

	Column name	Column definition	Methodology	Data specifications
3.4.5	**Unit of Measurement of Hazardous Substances** (Unit_HazSubs)	Unit of measurement of hazardous substance, as defined in the codelist.	This is a required, not null field. Units of measurement expressed per litre (in rivers, lakes, and seawater (TCM)), or per gramme or kilogramme (in biota and sediment (TCM)).	Datatype: string Minimum size: 1 Maximum size: 20
3.4.6	**Chemical Abstract Service Number** (CASNumber)	Chemical Abstract Service Number of the hazardous substance or other chemical determinand, as defined in the codelist.	This a required, not null field in case the CAS number of reported substance exists. WISE-SoE Rivers and Lakes water quality: 62 substances in the codelist are marked as "Preferred SoE Hazardous Substances". Please focus on these substances in your reporting above all. Codelist is available as Excel table on public section of Circa as well - see the link in Summary of changes in the Chapter 1. Determinands monitored but not detailed in the codelist can be included in the data file too. Please provide CAS Number and Name in such case. WISE-DWD: Write CAS number in case of pesticides.	Datatype: string Minimum size: 0 Maximum size: 64
3.4.7	**CEN/ISO** (CEN/ISO)	CEN/ISO code of the methods	See the CEN/ISO code list for suggested values. If the method used is not found in the code list, please provide a brief description.	Datatype: string Minimum size: 0 Maximum size: 255
3.4.8	**Number of Samples** (NumberOfSamples)	Number of samples included in aggregated data.	This is a required, not null field.	Datatype: integer Maximum size: 4 Minimum inclusive value: 1
3.4.9	**Number of Samples below Limit of Quantification** (NumberOfSamplesBelowLOQ)	Number of samples below limit of quantification within aggregation period		Datatype: integer Maximum size: 4 Minimum inclusive value: 0

	Column name	Column definition	Methodology	Data specifications
3.4.10	**Limit of Detection** (LimitOfDetection)	Concentration for which there is a desirably small probability (around 5%) that the determinand will not be detected i.e. there is a 95% probability that the determinand will be detected.	Aggregated data reporting: In case of using different limits within the aggregation period, please enter the highest value.	Datatype: float
3.4.11	**Limit of Quantification** (LimitOfQuantification)	The smallest concentration that can be distinguished from the analytical blank at a chosen level of statistical confidence (usually 95%).	Hazardous substances: Required, not null field. Nutrients: Voluntary field Aggregated data reporting: In case of using different limits within the aggregation period, please enter the highest value.	Datatype: float
3.4.12	**Minimum** (Minimum)	Minimum disaggregated sample concentration value of the input data used for aggregation.	On aggregation, sample concentration values recorded as below the limit of detection or quantification should be replaced with a value equivalent to half the limit of detection or quantification.	Datatype: float Minimum inclusive value: 0
3.4.13	**Mean** (Mean)	Mean concentration value of aggregated data.	This is a required, not null field. On aggregation, sample concentration values recorded as below the limit of detection or quantification should be replaced with a value equivalent to half the limit of detection or quantification.	Datatype: float Minimum inclusive value: 0
3.4.14	**Maximum** (Maximum)	Maximum disaggregated sample concentration value of the input data used for aggregation.	On aggregation, sample concentration values recorded as below the limit of detection or quantification should be replaced with a value equivalent to half the limit of detection or quantification.	Datatype: float Minimum inclusive value: 0
3.4.15	**Median** (Median)	Median concentration value of aggregated data.	On aggregation, sample concentration values recorded as below the limit of detection or quantification should be replaced with a value equivalent to half the limit of detection or quantification.	Datatype: float Minimum inclusive value: 0
3.4.16	**Standard Deviation** (StandardDeviation)	Standard deviation of concentration values of aggregated data.	On aggregation, sample concentration values recorded as below the limit of detection or quantification should be replaced with a value equivalent to half the limit of detection or quantification.	Datatype: float Minimum inclusive value: 0

	Column name	Column definition	Methodology	Data specifications
3.4.17	**Sample Depth** (SampleDepth)	Depth at which sample taken in metres below water surface. Rivers, Lakes: In case of aggregated data please provide average sample depth. TCM: In case of an integrated sample provide the upper depth of the sample.	TCM: This is a required, not null field. If reporting an integrated sample from e.g. 0-10 m enter the upper depth of the integrated sample here (in this example 0). Rivers, Lakes: This field is required for distinct measurements. For surface concentrations, enter value 0. The measurements from different depths can be reported as separate samples; if so please report the sample depth for each measurement. If the measurement from different samples are aggregated into one value, please describe the depth range and aggregation method in the field "Method of Subsites Spatial Aggregation".	Datatype: float Minimum inclusive value: 0 Unit: m
3.4.18	**Number of subsites** (NoOfSubsites)	Number of subsites.		Datatype: integer Maximum size: 3 Minimum inclusive value: 1 Maximum inclusive value: 100
3.4.19	**Method of Subsites Spatial Aggregation** (MethodSubsitesSpatialAggreg)	Method of Subsites Spatial Aggregation field is used only if the data are spatially aggregated (No. of subsites > 1), e.g. several subsites across the river profile or across lake depth profile are joined to one monitoring station.	State that the data are spatially averaged and specify if they are depth-averaged (lakes only) or width-averaged (rivers only). Please note that all supportive determinands (pH, temperature, etc.) for aggregated data should be aggregated in the same way as reported here.	Datatype: string Minimum size: 0 Maximum size: 255

	Column name	Column definition	Methodology	Data specifications
3.4.20	**Remarks** (Remarks)	Remarks, comments or explanatory notes (free text).	Rivers, Lakes, Groundwater quality - concentration data tables: Enter the text "value confirmed" in the case you are sure the value exceeding the Potentially high value is correct. Lists of these high values for selected substances are available on the Forum folder: http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/wise-soe-reporting-2012/codelists-substances-water-quality-reporting	Datatype: string Minimum size: 0 Maximum size: 255

3.5 Hazardous Substances and Other Chemical Determinands in Lakes - Disaggregated Data table

Short name	HazSubstLakes_Disagg
Definition	Chemical quality data on the concentrations of hazardous substances and other chemical determinands in lakes are requested from EEA Member Countries on an annual basis.
Methodology for obtaining data	Comparable and harmonised data are requested on the concentrations and distribution of hazardous substances and other chemical determinands in all lakes. The focus is on pesticides and other Preferred SoE Hazardous Substances marked in the codelist attached to the CASnumber field. Reporting of any other monitored polutants is welcomed. Countries are asked to provide the Name and CAS Number in case of reporting any additional determinands missing in the codelist.
	Countries are also asked to provide a description of the analytical method, preferable as a CEN/ISO code (if available).

Columns in **Hazardous Substances and Other Chemical Determinands in Lakes - Disaggregated Data** table:

	Column name	Column definition	Methodology	Data specifications
3.5.1	**Country Code** (CountryCode)	Abbreviation of EEA Member or Collaborating Country, as defined in the codelist.	This is a required, not null field.\n\nISO 3166-alpha-2 code elements.	string codelist: see section 4
3.5.2	**National Station ID** (NationalStationID)	Identifier of the river or lake monitoring station, the water quantity station, the TCM flux station or monitoring station, all unique at the national level.\n\nA TCM station should be a geographically fixed location, an area in which actual sampling locations vary from survey to survey or an area with a defined salinity range within which samples have been taken. Each station must be referred to by its single, central location.\n\nSupplementary information can be included in the Remarks field.	This is a required, not null field.\n\nThe NationalStationID must be a unique identifier at the national level and must contain no duplicate values.\n\nIt should be the same ID as supplied in previous updates unless the ID numbering system has changed, in which case a full resupply of all data should be provided using the new ID.\n\nFor TCM flux stations, the NationalStationID should be the same as that provided for the river flux station.	Datatype: string Minimum size: 1 Maximum size: 255
3.5.3	**Year** (Year)	Year of aggregation period (aggregated data sets) or year in which sample taken (disaggregated data sets), in format YYYY.	This is a required, not null field.\n\nYear should be no later than that requested in the latest data request.	Datatype: integer Maximum size: 4 Minimum inclusive value: 1800 Maximum inclusive value: 2011

	Column name	Column definition	Methodology	Data specifications
3.5.4	**Month** (Month)	Month in which sample taken, in range 0-12.	This is a required, not null field. It is possible that the Month value may not be available, in which case the value should be provided as 0.	Datatype: integer Maximum size: 2 Minimum inclusive value: 0 Maximum inclusive value: 12
3.5.5	**Day** (Day)	Day on which sample taken, in range 0-31.	This is a required, not null field. It is possible that the Day value may not be available, in which case the value should be provided as 0.	Datatype: integer Maximum size: 2 Minimum inclusive value: 0 Maximum inclusive value: 31
3.5.6	**Hazardous Substance Determinand Name** (DeterminandHazSubsName)	Name of hazardous substance or other chemical determinand, as defined in codelist.	This is a required, not null field. Rivers, Lakes, TCM: Use codelist embedded to the Chemical Abstract Service Number (CASNumber) field, column Definition. Emissions: Use codelist embedded to the Hazardous Substances Determinand ID field, column Short Description. Data could also be provided for any other hazardous substances which are not defined in codelist. Use ASCII characters only.	Datatype: string Minimum size: 0 Maximum size: 255
3.5.7	**Unit of Measurement of Hazardous Substances** (Unit_HazSubs)	Unit of measurement of hazardous substance, as defined in the codelist.	This is a required, not null field. Units of measurement expressed per litre (in rivers, lakes, and seawater (TCM)), or per gramme or kilogramme (in biota and sediment (TCM)).	Datatype: string Minimum size: 1 Maximum size: 20

25

	Column name	Column definition	Methodology	Data specifications
3.5.8	**Chemical Abstract Service Number** (CASNumber)	Chemical Abstract Service Number of the hazardous substance or other chemical determinand, as defined in the codelist.	This a required, not null field in case the CAS number of reported substance exists. WISE-SoE Rivers and Lakes water quality: 62 substances in the codelist are marked as "Preferred SoE Hazardous Substances". Please focus on these substances in your reporting above all. Codelist is available as Excel table on public section of Circa as well - see the link in Summary of changes in the Chapter 1. Determinands monitored but not detailed in the codelist can be included in the data file too. Please provide CAS Number and Name in such case. WISE-DWD: Write CAS number in case of pesticides.	Datatype: string Minimum size: 0 Maximum size: 64
3.5.9	**CEN/ISO** (CEN/ISO)	CEN/ISO code of the methods	See the CEN/ISO code list for suggested values. If the method used is not found in the code list, please provide a brief description.	Datatype: string Minimum size: 0 Maximum size: 255
3.5.10	**LOD_LOQ_Flag** (LOD_LOQ_Flag)	Flag to indicate sample below analytical limit of detection (LOD) or limit of quantification (LOQ).	Required field for hazardous substances reporting if sample concentration value is below the the limit of detection or quantification. Enter the character [if sample concentration value is below the the limit of detection. Enter the character < if sample concentration value is below the the limit of quantification. Keep blank in other cases.	string codelist: see section 4

	Column name	Column definition	Methodology	Data specifications
3.5.11	**Concentration** (Concentration)	Concentration of determinand in sample (negative values should not be supplied). EXCEPTION: In case the determinand is Temperature, minimum value up to -3 is allowed for seawater temperature only.	This is a required, not null field. If the sample concentration value is below the limit of detection or limit of quantification, enter the limit of detection or limit of quantification value itself into the Concentration field and fill the field LOD_LOQ_Flag with appropriate character ([or <). For aggregated data (from sub-sites), enter the mean concentration of the samples.	Datatype: float Minimum inclusive value: 0
3.5.12	**Sample Depth** (SampleDepth)	Depth at which sample taken in metres below water surface. Rivers, Lakes: In case of aggregated data please provide average sample depth. TCM: In case of an integrated sample provide the upper depth of the sample.	TCM: This is a required, not null field. If reporting an integrated sample from e.g. 0-10 m enter the upper depth of the integrated sample here (in this example 0). Rivers, Lakes: This field is required for distinct measurements. For surface concentrations, enter value 0. The measurements from different depths can be reported as separate samples; if so please report the sample depth for each measurement. If the measurement from different samples are aggregated into one value, please describe the depth range and aggregation method in the field "Method of Subsites Spatial Aggregation".	Datatype: float Minimum inclusive value: 0 Unit: m
3.5.13	**Number of subsites** (NoOfSubsites)	Number of subsites.		Datatype: integer Maximum size: 3 Minimum inclusive value: 1 Maximum inclusive value: 100

	Column name	Column definition	Methodology	Data specifications
3.5.14	**Method of Subsites Spatial Aggregation** (MethodSubsitesSpatialAggreg)	Method of Subsites Spatial Aggregation field is used only if the data are spatially aggregated (No. of subsites > 1), e.g. several subsites across the river profile or across lake depth profile are joined to one monitoring station.	State that the data are spatially averaged and specify if they are depth-averaged (lakes only) or width-averaged (rivers only). Please note that all supportive determinands (pH, temperature, etc.) for aggregated data should be aggregated in the same way as reported here.	Datatype: string Minimum size: 0 Maximum size: 255
3.5.15	**Remarks** (Remarks)	Remarks, comments or explanatory notes (free text).	Rivers, Lakes, Groundwater quality - concentration data tables: Enter the text "value confirmed" in the case you are sure the value exceeding the Potentially high value is correct. Lists of these high values for selected substances are available on the Forum folder: http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/wise-soe-reporting-2012/codelists-substances-water-quality-reporting	Datatype: string Minimum size: 0 Maximum size: 255

3.6 Hazardous Substances in Lakes - Supportive Determinands table

Short name	HazSubstLakes_SuppDet
Definition	Supportive determinands of hazardous substances in Lakes
Short Description	Supportive determinands of hazardous substances in Lakes
Methodology for obtaining data	Please enter supportive determinands values into this table. Supportive determinands should be provided for relevant hazardous substances data records.

Columns in **Hazardous Substances in Lakes - Supportive Determinands** table:

	Column name	Column definition	Methodology	Data specifications
3.6.1	**Country Code** (CountryCode)	Abbreviation of EEA Member or Collaborating Country, as defined in the codelist.	This is a required, not null field. ISO 3166-alpha-2 code elements.	string codelist: see section 4
3.6.2	**National Station ID** (NationalStationID)	Identifier of the river or lake monitoring station, the water quantity station, the TCM flux station or monitoring station, all unique at the national level. A TCM station should be a geographically fixed location, an area in which actual sampling locations vary from survey to survey or an area with a defined salinity range within which samples have been taken. Each station must be referred to by its single, central location. Supplementary information can be included in the Remarks field.	This is a required, not null field. The NationalStationID must be a unique identifier at the national level and must contain no duplicate values. It should be the same ID as supplied in previous updates unless the ID numbering system has changed, in which case a full resupply of all data should be provided using the new ID. For TCM flux stations, the NationalStationID should be the same as that provided for the river flux station.	Datatype: string Minimum size: 1 Maximum size: 255
3.6.3	**Year** (Year)	Year of aggregation period (aggregated data sets) or year in which sample taken (disaggregated data sets), in format YYYY.	This is a required, not null field. Year should be no later than that requested in the latest data request.	Datatype: integer Maximum size: 4 Minimum inclusive value: 1800 Maximum inclusive value: 2011
3.6.4	**Month** (Month)	Month in which sample taken, in range 0-12.	This is a required, not null field. It is possible that the Month value may not be available, in which case the value should be provided as 0.	Datatype: integer Maximum size: 2 Minimum inclusive value: 0 Maximum inclusive value: 12

	Column name	Column definition	Methodology	Data specifications
3.6.5	**Day** (Day)	Day on which sample taken, in range 0-31.	This is a required, not null field. It is possible that the Day value may not be available, in which case the value should be provided as 0.	Datatype: integer Maximum size: 2 Minimum inclusive value: 0 Maximum inclusive value: 31
3.6.6	**Hazardous Substance Supportive Determinand** (Determinand_Supportive)	Supportive determinands needed for correct interpretation of some hazardous substances.	Enter supportive determinand values relevant for reported samples of hazardous substances.	string codelist: see section 4
3.6.7	**Value** (Value)	Reported value of determinand (concentration or other measured quantity).		Datatype: float
3.6.8	**Unit of Measurement of Hazardous Substances Supportive Determinands** (Unit_Determinand_Supportive)	Unit of measurement of hazardous substances supportive determinands, as defined in the codelist.		string codelist: see section 4
3.6.9	**Remarks** (Remarks)	Remarks, comments or explanatory notes (free text).	Rivers, Lakes, Groundwater quality - concentration data tables: Enter the text "value confirmed" in the case you are sure the value exceeding the Potentially high value is correct. Lists of these high values for selected substances are available on the Forum folder: http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/wise-soe-reporting-2012/codelists-substances-water-quality-reporting	Datatype: string Minimum size: 0 Maximum size: 255

3.7 Biology in Lakes - Aggregated data table

Short name	BiologyLakes_Agg
Definition	Aggregated biological data from Lakes.
Short Description	Aggregated biological data from Lakes.
Methodology for obtaining data	Biological data should be reported as national EQRs (Ecological Quality Ratio) which are specific for a impact type (eutrophication, acidification etc.). Please report only one type of national EQR for each BQE (Biological Quality Element) and impact type. If there are cases where more than one type of national EQR must be reported per BQE and impact type, please inform about this.

In addition, certain metrics can be reported at original scale (Chlorophyll_a, TotalPhytoplanktonBiomass, CyanobacteriaProportion, CharaphytesPresence, IsoetidesPresence, MacrophyteDepthLimit). More information is given in the description of DeterminandBiology.

Classification systems for the different national EQRs can depend on waterbody type, therefore the field WaterbodyTypeNCS (NCS = National Classification System) should always be filled in. For practical reasons, information on waterbody type should be reported in the table BiologyLakes_Agg (and not in the table StationsLakesBio). Intercalibration waterbody types are preferred, but in cases where this is not possible, other national waterbody types can be reported instead. Where possible, intercalibration waterbody types should in addition be reported in the field WaterbodyTypeIC.

Only one WaterbodyTypeNCS can be reported per BQE in one row. For each WaterbodyTypeNCS, please use a new row and repeat the full information on classification systems for each BQE and pressure type.

If the classification system is identical for all waterbody types, please fill in "general" as WaterbodyTypeNCS.

The information in WaterbodyTypeNCS must be consistent with what is reported in the table ClassificationSystemLakes.

Please see SoE reporting sheets for more information:

http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/reporting_eionetwfd/reporting_guidance

Columns in **Biology in Lakes - Aggregated data** table:

	Column name	Column definition	Methodology	Data specifications
3.7.1	**Country Code** (CountryCode)	Abbreviation of EEA Member or Collaborating Country, as defined in the codelist.	This is a required, not null field. ISO 3166-alpha-2 code elements.	string codelist: see section 4
3.7.2	**Water Category** (WaterCategory)	Water Category, as defined in the codelist.	This is a required, not null field.	string codelist: see section 4

	Column name	Column definition	Methodology	Data specifications
3.7.3	**National Station ID** (NationalStationID)	Identifier of the river or lake monitoring station, the water quantity station, the TCM flux station or monitoring station, all unique at the national level.

A TCM station should be a geographically fixed location, an area in which actual sampling locations vary from survey to survey or an area with a defined salinity range within which samples have been taken. Each station must be referred to by its single, central location.

Supplementary information can be included in the Remarks field. | This is a required, not null field.

The NationalStationID must be a unique identifier at the national level and must contain no duplicate values.

It should be the same ID as supplied in previous updates unless the ID numbering system has changed, in which case a full resupply of all data should be provided using the new ID.

For TCM flux stations, the NationalStationID should be the same as that provided for the river flux station. | Datatype: string
Minimum size: 1
Maximum size: 255 |
| 3.7.4 | **Waterbody type as used in the national classification system** (WaterbodyTypeNCS) | Type of waterbody as defined by the member state. | This is a required, not null field. | Datatype: string
Minimum size: 1
Maximum size: 50 |
| 3.7.5 | **Intercalibration waterbody type** (WaterbodyTypeIC) | Type of waterbody as defined by the WFD Intercalibration process | Allowed values: see codelist | string codelist:
see section 4 |
| 3.7.6 | **Year** (Year) | Year of aggregation period (aggregated data sets) or year in which sample taken (disaggregated data sets), in format YYYY. | This is a required, not null field.

Year should be no later than that requested in the latest data request. | Datatype: integer
Maximum size: 4
Minimum inclusive value: 1800
Maximum inclusive value: 2011 |

	Column name	Column definition	Methodology	Data specifications
3.7.7	**Aggregation Period** (AggregationPeriod)	Period of aggregation, as defined in the codelist.	This is a required, not null field. Data are requested, preferably, as annually aggregated mean values. AggregationPeriod for a station should be consistent from year to year, otherwise the time series from this station will be broken, and data from this station may have to be excluded from trend analyses. For rivers and lakes, AggregationPeriod "Annual" should therefore be used even if the station is not sampled throughout the whole year. For lakes, data can also be aggregated by alternative aggregation periods in addition to Annual (see the list of allowable values) and reported as additional records, if wanted.	string codelist: see section 4
3.7.8	**Aggregation Period - Specification by Months** (AggregationMonths)	Additional information - detailed specification of aggregation period by months. Should be used especially in case the reported period of aggregation is different from any value of AggregationPeriod column codelist.	Enter the succession or range of months, using the order of months within the year (e.g.: 05,06,07 or 04-10).	Datatype: string Minimum size: 0 Maximum size: 128
3.7.9	**Aggregation Period - Length in Months** (AggregationLength)	Number of months in aggregation period.		Datatype: integer Maximum size: 2 Minimum inclusive value: 1 Maximum inclusive value: 12
3.7.10	**Determinand name for biological metrics** (DeterminandBiology)	Pressure-specific determinand name for biological metrics, as defined in the codelist.	This is a required, not null field. The codelist contains all determinands relating to biological metrics. The determinand name must be unique for each record reported per station and year, and must therefore be both BQE-specific and pressure-specific (because different EQR values based on the same BQE may be reported for different pressures).	string codelist: see section 4

	Column name	Column definition	Methodology	Data specifications
3.7.11	**Unit of Biological Metrics** (UnitBiology)	Unit of biological metrics, as defined in the codelist.	This is a required, not null field. The appropriate unit for each biological metrics is given in the field Definition for the code list of the element DeterminandBiology.	string codelist: see section 4
3.7.12	**Biological Quality Element** (BQE)	Name of biological quality element, as defined in the codelist.	This is a required, not null field. The codelist contains all determinands relating to biological metrics. Data should be provided where available and applicable.	string codelist: see section 4
3.7.13	**Scale of biological metric** (MetricScale)	The scale the of biological metric: EQR (Ecological Quality Ratio, i.e. metric in original scale divided by the metric's reference value) or original (metric reported in its original scale).	This is a required, not null field. The codelist contains all allowed entries for the metric scale.	string codelist: see section 4
3.7.14	**Ecological status class per biological determinand** (DeterminandStatusClass)	Ecological status class of a monitoring station calculated for a single biological quality element, as defined in the codelist. DeterminandStatusClass should be reported only for records with MetricScale = EQR. Biology in TC waters, table WaterbodyBiologyTC_Agg: Ecological status class of a waterbody calculated for a single biological quality element, as defined in the codelist.	This is a required, not null field.	string codelist: see section 4
3.7.15	**Number of Samples** (NumberOfSamples)	Number of samples included in aggregated data.	This is a required, not null field.	Datatype: integer Maximum size: 4 Minimum inclusive value: 1
3.7.16	**Minimum Value** (MinValue)	Minimum disaggregated sample value of the input data used for aggregation.		Datatype: float Minimum inclusive value: 0
3.7.17	**Mean Value Original** (MeanValueOriginal)	Mean value of metric in the original metric scale (lakes only).	This field is required for all records with DeterminandBiology NOT containing "EQR" and MetricScale = "Original" (e.g. Chlorophyll a).	Datatype: float

	Column name	Column definition	Methodology	Data specifications
3.7.18	**Mean ValueEQR** (MeanValueEQR)	Mean value of metric converted to EQR scale (Ecological Quality Ratio)	This field is required for all records with DeterminandBiology containing "EQR" and MetricScale = EQR. EQR is usually calculated as metric value divided by reference value, but different methods are used depending on the metric and the country.	Datatype: float Minimum inclusive value: 0
3.7.19	**Mean ValueNormEQR** (MeanValueNormEQR)	Mean value of metric converted to normalised EQR scale (Ecological Quality Ratio).	This field is optional for all records with a MeanValueEQR reported. MeanValueNormEQR will also be calculated by EEA.	Datatype: float Minimum inclusive value: 0
3.7.20	**Maximum Value** (MaxValue)	Maximum disaggregated sample value of the input data used for aggregation.		Datatype: float Minimum inclusive value: 0
3.7.21	**Median Value** (MedianValue)	Median value of aggregated data.		Datatype: float Minimum inclusive value: 0
3.7.22	**Standard Deviation Value** (StDevValue)	Standard deviation of values of aggregated data.		Datatype: float Minimum inclusive value: 0
3.7.23	**Total depth of water column** (TotalDepth)	Total depth of water column at the sampling location and at the time of sampling (meters).		Datatype: float Minimum inclusive value: 0 Maximum inclusive value: 9999.99 Unit: m
3.7.24	**Number of subsites** (NoOfSubsites)	Number of subsites.		Datatype: integer Maximum size: 3 Minimum inclusive value: 1 Maximum inclusive value: 100
3.7.25	**Method of Subsites Spatial Aggregation** (MethodSubsitesSpatialAggreg)	Method of Subsites Spatial Aggregation field is used only if the data are spatially aggregated (No. of subsites > 1), e.g. several subsites across the river profile or across lake depth profile are joined to one monitoring station.	State that the data are spatially averaged and specify if they are depth-averaged (lakes only) or width-averaged (rivers only). Please note that all supportive determinands (pH, temperature, etc.) for aggregated data should be aggregated in the same way as reported here.	Datatype: string Minimum size: 0 Maximum size: 255

	Column name	Column definition	Methodology	Data specifications
3.7.26	**Remarks** (Remarks)	Remarks, comments or explanatory notes (free text).	Rivers, Lakes, Groundwater quality - concentration data tables: Enter the text "value confirmed" in the case you are sure the value exceeding the Potentially high value is correct. Lists of these high values for selected substances are available on the Forum folder: http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/wise-soe-reporting-2012/codelists-substances-water-quality-reporting	Datatype: string Minimum size: 0 Maximum size: 255

3.8 Classification system for Ecological Status Classes in Lakes table

Short name	ClassificationSystemLakes
Definition	Information on national classification system for each biological determinand and waterbody type, including reference conditions and boundaries of ecological status classes and ecological potential classes (for artificial and/or heavily modified waterbodies).
Short Description	Classification system for Ecological Status Classes in Lakes
Methodology for obtaining data	Classification system (class boundaries and reference conditions) should be reported only for biological determinands reported as national EQRs (Ecological Quality Ratio), and for Chlorophyll-a.

All class boundary values should be reported at the national EQR scale (normally between 0 and 1).

Reference conditions, however, should be reported at the scale of the original metric (any value). Reference conditions are particularly important for Chlorophyll-a.

Please see illustration "Reporting of biological metric values and class boundaries in EQR scale" for more explanation:

http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/wise_reporting_2011/biological_reporting/biologydd_20110617jpg

For artificial waterbodies and highly modified waterbodies, the information given on reference conditions and class boundaries will represent ecological potential instead of ecological status. Classification systems for the different national EQRs can depend on waterbody type - therefore the field WaterbodyTypeNCS (NCS = National Classification System) should always be filled in. Intercalibration waterbody types are preferred, but in cases where this is not possible, other national waterbody types can be reported instead. Only one waterbody type can be reported per BQE in one row. For each waterbody type, please use a new row and repeat the full information on classification systems for each BQE and pressure type.

If the classification system is identical for all waterbody types, please fill in "general" as WaterbodyTypeNCS.

The information in WaterbodyTypeNCS must be consistent with what is reported in the table BiologyLakes_Agg.

Columns in **Classification system for Ecological Status Classes in Lakes** table:

	Column name	Column definition	Methodology	Data specifications
3.8.1	**Country Code** (CountryCode)	Abbreviation of EEA Member or Collaborating Country, as defined in the codelist.	This is a required, not null field. ISO 3166-alpha-2 code elements.	string codelist: see section 4
3.8.2	**Water Category** (WaterCategory)	Water Category, as defined in the codelist.	This is a required, not null field.	string codelist: see section 4

	Column name	Column definition	Methodology	Data specifications
3.8.3	**Determinand name for biological metrics** (DeterminandBiology)	Pressure-specific determinand name for biological metrics, as defined in the codelist.	This is a required, not null field. The codelist contains all determinands relating to biological metrics. The determinand name must be unique for each record reported per station and year, and must therefore be both BQE-specific and pressure-specific (because different EQR values based on the same BQE may be reported for different pressures).	string codelist: see section 4
3.8.4	**Biological Quality Element** (BQE)	Name of biological quality element, as defined in the codelist.	This is a required, not null field. The codelist contains all determinands relating to biological metrics. Data should be provided where available and applicable.	string codelist: see section 4
3.8.5	**Physicochemical impact for biological determinand** (ImpactBio)	The dominant physical or chemical anthropogenic impact for which the biological metric is an indicator.	This is a required, not null field. The codelist contains all allowed values for physicochemical impacts.	string codelist: see section 4
3.8.6	**Name of biologial metric** (MetricName)	Name or other description of biological metric (as basis for calculated EQR).	For river phytobenthos, this field must also contain specification of the type of phytobenthos: diatoms, non-diatoms, macrohpytes, or a combination. For lake macrophytes, this field must also contain specification on the type of macrophytes: only submersed or a combination of submersed and emergent (helophytes).	Datatype: string Minimum size: 0 Maximum size: 255
3.8.7	**Description of the sampling method for biological data** (SamplingMethodBio)	Written explanation and/or URL (free text).		Datatype: string Minimum size: 0 Maximum size: 255
3.8.8	**Description of the analysis method (identification and quantification) for biological data** (AnalysisMethodBio)	Written explanation and/or URL (free text). If possible, use CEN/ISO code (http://dd.eionet.europa.eu/data_element.jsp?mode=view&delem_idf=CEN_ISO)		Datatype: string Minimum size: 0 Maximum size: 255

	Column name	Column definition	Methodology	Data specifications
3.8.9	**Waterbody type as used in the national classification system** (WaterbodyTypeNCS)	Type of waterbody as defined by the member state.	This is a required, not null field.	Datatype: string Minimum size: 1 Maximum size: 50
3.8.10	**Heavily modified water body** (HMWB)	Lake is identified as heavily modified in terms of hydromorphological impacts, such as impounds and high water level fluctuations, according to WFD-compliant national guidelines	Provide data as text Y or N.	boolean codelist: see section 4
3.8.11	**Artificial water body** (ArtificialWB)	Station is located in an artificial water body, (e.g. artificial water reservoir) in terms of hydromorphological impacts, such as impounds and high water level fluctuations, according to WFD- compliant national guidelines.	Provide data as text Y or N.	boolean codelist: see section 4
3.8.12	**Reference condition** (ReferenceCondition)	Ecological reference condition of waterbody, specific per biological determinand and waterbody type.	Reference value of biological determinand (metric). The reference condition should be given in the original scale of the metric, even if the metric is reported as EQR values.	Datatype: float Minimum inclusive value: 0
3.8.13	**Boundary between High and Good ecological status classes** (HG_Boundary)	Boundary between High and Good ecological status classes, for a given biological determinand and waterbody type.	The class boundary should be given at the scale of the national EQR (between 0 and 1).	Datatype: float Minimum inclusive value: 0
3.8.14	**Boundary between Good and Moderate ecological status classes** (GM_Boundary)	Boundary between Good and Moderate ecological status classes (alternatively, ecological potential classes), for a given biological determinand and waterbody type.	The class boundary should be given at the scale of the national EQR (between 0 and 1).	Datatype: float Minimum inclusive value: 0
3.8.15	**Boundary between Moderate and Poor ecological status classes** (MP_Boundary)	Boundary between Moderate and Poor ecological status classes (alternatively, ecological potential classes), for a given biological determinand and waterbody type.	The class boundary should be given at the scale of the national EQR (between 0 and 1).	Datatype: float Minimum inclusive value: 0
3.8.16	**Boundary between Poor and Bad ecological status classes** (PB_Boundary)	Boundary between Poor and Bad ecological status classes (alternatively, ecological potential classes), for a given biological determinand and waterbody type.	The class boundary should be given at the scale of the national EQR (between 0 and 1).	Datatype: float Minimum inclusive value: 0
3.8.17	**Intercalibration status of the biological determinand** (IntercalibratedDeterminandBiology)	Has the biological determinand been intercalibrated?	Provide data as text "yes" or "no".	string codelist: see section 4

	Column name	Column definition	Methodology	Data specifications
3.8.18	**Intercalibration status of the class boundaries of the biological determinand** (IntercalibratedClassBoundaries)	Are the class boundaries of the biological determinand correct for the given waterbody type, according to the intercalibration?	Provide data as text "yes" or "no".	string codelist: see section 4
3.8.19	**Intercalibration status of the waterbody type** (IntercalibratedWaterbodyType)	Has the waterbody type been included in intercalibration?	Provide data as text "yes" or "no".	string codelist: see section 4
3.8.20	**Remarks** (Remarks)	Remarks, comments or explanatory notes (free text).	Rivers, Lakes, Groundwater quality - concentration data tables: Enter the text "value confirmed" in the case you are sure the value exceeding the Potentially high value is correct. Lists of these high values for selected substances are available on the Forum folder: http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/wise-soe-reporting-2012/codelists-substances-water-quality-reporting	Datatype: string Minimum size: 0 Maximum size: 255

4. Codelists

4.1 Codelists for **Physical Characteristics of Lake Monitoring Stations** table

4.1.1 Country Code codelist

Value	Definition	Short Description
AL	Albania	
AT	Austria	
BA	Bosnia and Herzegovina	
BE	Belgium	
BG	Bulgaria	
CH	Switzerland	
CY	Cyprus	
CZ	Czech Republic	
DE	Germany	
DK	Denmark	
EE	Estonia	
ES	Spain	
FI	Finland	
FR	France	
GB	United Kingdom	
GR	Greece	
HR	Croatia	
HU	Hungary	
IE	Ireland	
IS	Iceland	
IT	Italy	
LI	Liechtenstein	
LT	Lithuania	
LU	Luxembourg	
LV	Latvia	
ME	Montenegro	
MK	Macedonia, the Former Yugoslav Republic of	
MT	Malta	
NL	Netherlands	
NO	Norway	
PL	Poland	
PT	Portugal	
RO	Romania	
RS	Serbia	
SE	Sweden	
SI	Slovenia	
SK	Slovakia	
TR	Turkey	
XK	Kosovo	

4.1.2 WFD station codelist

Value	Definition	Short Description
no	Station was not reported as WFD Art.8 monitoring station.	
yes	Station was reported as WFD Art.8 monitoring station.	

4.1.3 Water Category codelist

Value	Definition	Short Description
C	Coastal water (TCM), as defined by the WFD.	
CN	Canal (Rivers)	
LK	Lake (Lakes)	
M	Marine water (TCM)	
RS	Reservoir (Lakes)	
RV	River (Rivers)	
T	Transitional water (TCM), as defined by the WFD.	

4.1.4 River Basin District Code codelist

Value	Definition	Short Description
AD1	Andorra	AD
AT1000	Danube	AT
AT2000	Rhine	AT
AT5000	Elbe	AT
BEEscaut_RW	Scheldt	BE
BEEscaut_Schelde_BR	Scheldt	BE
BEMaas_VL	Meuse	BE
BEMeuse_RW	Meuse	BE
BERhin_RW	Rhine	BE
BESchelde_VL	Scheldt in Flanders	BE
BESeine_RW	Seine	BE
BG1000	Danube River Basin District	BG
BG2000	Black Sea River Basin District	BG
BG3000	East Aegean River Basin District	BG
BG4000	West Aegean River Basin District	BG
CH10	Rhine	CH
CH50	Rhone	CH
CH60	Po	CH
CH80	Danube	CH
CH90	Adige	CH
CY001	Cyprus	CY
CZ_1000	Danube	CZ
CZ_5000	Elbe	CZ

Value	Definition	Short Description
CZ_6000	Oder	CZ
DE1000	Danube River Basin District	DE
DE2000	Rhine River Basin District	DE
DE3000	Ems River Basin District	DE
DE4000	Weser River Basin District	DE
DE5000	German Elbe	DE
DE6000	Oder	DE
DE7000	Maas River Basin District (German Part)	DE
DE9500	Eider	DE
DE9610	Schlei/Trave	DE
DE9650	Warnow/Peene	DE
DK1	Jutland and Funen	DK
DK2	Zealand	DK
DK3	Bornholm	DK
DK4	Vidaa-Krusaa	DK
EE1	West-Estonian River Basin District	EE
EE2	East-Estonian River Basin District	EE
EE3	Koiva River Basin District	EE
ES010	Minho	ES
ES014	Galician Coast	ES
ES015	Basque County Internal Basins	ES
ES016	Cantabrian	ES
ES020	Duero	ES
ES030	Tagus	ES
ES040	Guadiana River Basin District	ES
ES050	Guadalquivir	ES
ES060	Andalusia Mediterranean Basins	ES
ES063	Guadalete and Barbate	ES
ES064	Tinto, Odiel and Piedras	ES
ES070	Segura	ES
ES080	Jucar	ES
ES091	Ebro	ES
ES100	Catalan River Basin District	ES
ES110	Balearic Islands	ES
ES120	Gran Canaria	ES
ES122	Fuerteventura	ES
ES123	Lanzarote	ES
ES124	Tenerife	ES
ES125	La Palma	ES
ES126	La Gomera	ES
ES127	El Hierro	ES
ES150	Ceuta	ES
ES160	Melilla	ES
FIVHA1	Vuoksi River Basin District	FI
FIVHA2	Kymijoki-Gulf of Finland River Basin District	FI
FIVHA3	Kokemäenjoki-Archipelago Sea-Bothnian Sea River Basin District	FI
FIVHA4	Oulujoki-Iijoki River Basin District	FI
FIVHA5	Kemijoki River Basin District	FI

Value	Definition	Short Description
FIVHA6	Tornionjoki IRBD	FI
FIVHA7	Teno, Näätämöjoki and Paatsjoki IRBD	FI
FIWDA	Åland River Basin District	FI
FRA	L'Escaut, la Somme et les cours d'eau côtiers de la Manche et de la mer du Nord	FR
FRB1	Meuse	FR
FRB2	La Sambre	FR
FRC	Rhine	FR
FRD	Le Rhône et les cours d'eau côtiers méditerranéens	FR
FRE	Les cours d'eau de la Corse	FR
FRF	L'Adour, la Garonne, la Dordogne, la Charente et les cours d'eau côtiers charentais et aquitains	FR
FRG	La Loire, les cours d'eau côtiers vendéens et bretons	FR
FRH	La Seine et les cours d'eau côtiers normands	FR
FRI	Les cours d'eau de la Guadeloupe	FR
FRJ	Les cours d'eau de la Martinique	FR
FRK	Les fleuves et cours d'eau côtiers de la Guyane	FR
FRL	Les cours d'eau de la Réunion	FR
GBNIIENB	Neagh Bann	IE; !!! RBDcode starts with abbreviation GB
GBNIIENW	North Western	IE; !!! RBDcode starts with abbreviation GB
GR01	Western Peloponnese	GR
GR02	Northern Peloponnese	GR
GR03	Eastern Peloponnese	GR
GR04	Western Sterea Ellada	GR
GR05	Epirus	GR
GR06	Attica	GR
GR07	Eastern Sterea Ellada	GR
GR08	Thessalia	GR
GR09	Western Macedonia	GR
GR10	Central Macedonia	GR
GR11	Eastern Macedonia	GR
GR12	Thrace	GR
GR13	Crete	GR
GR14	Aegean Islands	GR
HU1000	Hungarian part of the Danube River Basin District	HU
IEEA	Eastern	IE
IEGBNISH	Shannon	IE
IESE	South Eastern	IE
IESW	South Western	IE
IEWE	Western	IE
IS1	Iceland	IS; RBD not included in the RBD GIS reference layer v1.4
ITA	Eastern Alps	IT
ITB	Po Basin	IT
ITC	Northern Appenines	IT
ITD	Serchio	IT

Value	Definition	Short Description
ITE	Middle Appenines	IT
ITF	Southern Appenines	IT
ITG	Sardinia	IT
ITH	Sicily	IT
LI1	Liechtenstein	LI
LT1100	Nemunas River Basin District	LT
LT2300	Venta River Basin District	LT
LT3400	Lielupe River Basin District	LT
LT4500	Dauguva River Basin District	LT
LU RB_000	Mosel	LU; !!! RBDcode contains space
LU RB_001	Chiers	LU; !!! RBDcode contains space
LVDUBA	Daugava river basin district	LV
LVGUBA	Gauja river basin district	LV
LVLUBA	Lielupe river basin district	LV
LVVUBA	Venta river basin district	LV
MC1	Monaco	MC
MTMALTA	Malta	MT
NLEM	Ems	NL
NLMS	Meuse	NL
NLRN	Rhine	NL
NLSC	Scheldt	NL
NO1101	Moere og Romsdal	NO
NO1102	Troendelag	NO
NO1103	Nordland	NO
NO1104	Troms	NO
NO1105	Finnmark	NO
NO5101	Glomma	NO
NO5102	West Bay	NO
NO5103	Agder	NO
NO5104	Rogaland	NO
NO5105	Hordaland	NO
NO5106	Sogn and Fjordane	NO
NOFIVHA5	Kemijoki	NO
NOFIVHA6	Tornionjoki (Finnish part)	NO
NOSE1	Bothnian Bay	NO
NOSE1TO	Torne River	NO
NOSE2	Bothnian Sea	NO
NOSE5	Skagerrak and Kattegat	NO
PL1000	Danube River Basin District	PL
PL2000	Vistula River Basin District	PL
PL3000	Swieza River Basin District	PL
PL4000	Jarft River Basin District	PL
PL5000	Elbe River Basin District	PL
PL6000	Oder River Basin District	PL
PL6700	Ucker River Basin District	PL
PL7000	Pregolya River Basin District	PL
PL8000	Nemunas River Basin District	PL
PL9000	Dniester River Basin District	PL

Value	Definition	Short Description
PTRH1	Minho and Lima	PT
PTRH10	Madeira	PT
PTRH2	Cavado, Ave and Leca	PT
PTRH3	Douro	PT
PTRH4	Vouga, Mondego and Lis	PT
PTRH5	Tagus and Western Basins	PT
PTRH6	Sado and Mira	PT
PTRH7	Guadiana	PT
PTRH8	Algarve Basins	PT
PTRH9	Azores	PT
RO1000	Danube River Basin District	RO
SE1	1. Bothnian Bay (Sweden)	SE
SE1TO	1. Bothnian Bay (International district Torne river - Sweden)	SE
SE2	2. Bothnian Sea (Sweden)	SE
SE3	3. North Baltic Sea (Sweden)	SE
SE4	4. South Baltic Sea (Sweden)	SE
SE5	5. Skagerrak and Kattegat (Sweden)	SE
SENO1102	2. Bothnian Sea (International drainage basin Trondelagsfylkene - Sweden)	SE
SENO1103	1. Bothnian Bay (International drainage basin Nordland - Sweden)	SE
SENO1104	1. Bothnian Bay (International drainage basin Troms - Sweden)	SE
SENO5101	5. Skagerrak and Kattegat (International drainage basin Glomma - Sweden)	SE
SI_RBD_1	Danube	SI
SI_RBD_2	North Adriatic	SI
SK30000	Vistula	SK
SK40000	Danube	SK
TR01	Meric Basin	TR; RBD not included in the RBD GIS reference layer v1.4
TR02	Marmara Basin	TR; RBD not included in the RBD GIS reference layer v1.4
TR03	Susurluk Basin	TR; RBD not included in the RBD GIS reference layer v1.4
TR04	Kuzey Ege Basin	TR; RBD not included in the RBD GIS reference layer v1.4
TR05	Gediz Basin	TR; RBD not included in the RBD GIS reference layer v1.4
TR06	K. Menderes Basin	TR; RBD not included in the RBD GIS reference layer v1.4
TR07	B. Menderes Basin	TR; RBD not included in the RBD GIS reference layer v1.4
TR08	Bat Akdeniz Basin	TR; RBD not included in the RBD GIS reference layer v1.4
TR09	Antalya Basin	TR; RBD not included in the RBD GIS reference layer v1.4
TR10	Burdur Lakes Basin	TR; RBD not included in the RBD GIS reference layer v1.4
TR11	Akarcay Basin	TR; RBD not included in the RBD GIS reference layer v1.4

Value	Definition	Short Description
TR12	Sakarya Basin	TR; RBD not included in the RBD GIS reference layer v1.4
TR13	Bati Karadeniz Basin	TR; RBD not included in the RBD GIS reference layer v1.4
TR14	Yesilirmak Basin	TR; RBD not included in the RBD GIS reference layer v1.4
TR15	Kizilirmak Basin	TR; RBD not included in the RBD GIS reference layer v1.4
TR16	Konya Closed Basin	TR; RBD not included in the RBD GIS reference layer v1.4
TR17	Dogu Akdeniz Basin	TR; RBD not included in the RBD GIS reference layer v1.4
TR18	Seyhan Basin	TR; RBD not included in the RBD GIS reference layer v1.4
TR19	Asi Basin	TR; RBD not included in the RBD GIS reference layer v1.4
TR20	Ceyhan Basin	TR; RBD not included in the RBD GIS reference layer v1.4
TR21	Firat ve Dicle Basin	TR; RBD not included in the RBD GIS reference layer v1.4
TR22	Dogu Karadeniz Basin	TR; RBD not included in the RBD GIS reference layer v1.4
TR23	Coruh Basin	TR; RBD not included in the RBD GIS reference layer v1.4
TR24	Aras Basin	TR; RBD not included in the RBD GIS reference layer v1.4
TR25	Van Lake Basin	TR; RBD not included in the RBD GIS reference layer v1.4
UK01	Scotland	GB
UK02	Solway Tweed	GB
UK03	Northumbria	GB
UK04	Humber	GB
UK05	Anglian	GB
UK06	Thames	GB
UK07	South East	GB
UK08	South West	GB
UK09	Severn	GB
UK10	Western Wales	GB
UK11	Dee	GB
UK12	North West	GB
UKGBNIIENB	Neagh Bann	GB
UKGBNIIENW	North Western	GB
UKGBNINE	North Eastern	GB
UKGI17	Gibraltar	GB

4.1.5 Representative Station codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.1.6 Reference Station codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.1.7 Impact Station codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.1.8 Largest Station codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.1.9 Geology codelist

Value	Definition	Short Description
calcareous	Predominant catchment geology is calcareous (as identified by geological maps)	Calcareous bedrock or deposits (e.g. marine deposits in lowland areas)
organic	Predominant catchment geology is organic or peat (as identified by geological maps)	This geology is often found in areas with bogs and wetlands
siliceous	Predominant catchment geology is siliceous (as identified by geological maps)	Examples of siliceous bedrock is granites and gneisses

4.1.10 Water colour average level codelist

Value	Definition	Short Description
high	>90 mg/l Pt	polyhumic
low	<30 mg/l Pt	oligohumic
moderate	30-90 mg/l Pt	mesohumic

4.1.11 Alkalinity average level codelist

Value	Definition	Short Description
high	>1 meq/l	
low	<0.2 meq/l	
moderate	0.2-1 meq/l	

4.1.12 Heavily modified water body codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.1.13 Artificial water body codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.2 Codelists for Proxy Pressures of Lakes table

4.2.1 Country Code codelist

Value	Definition	Short Description
AL	Albania	
AT	Austria	
BA	Bosnia and Herzegovina	
BE	Belgium	
BG	Bulgaria	
CH	Switzerland	
CY	Cyprus	
CZ	Czech Republic	
DE	Germany	
DK	Denmark	
EE	Estonia	
ES	Spain	
FI	Finland	
FR	France	
GB	United Kingdom	
GR	Greece	
HR	Croatia	
HU	Hungary	
IE	Ireland	
IS	Iceland	
IT	Italy	
LI	Liechtenstein	
LT	Lithuania	
LU	Luxembourg	
LV	Latvia	
ME	Montenegro	
MK	Macedonia, the Former Yugoslav Republic of	
MT	Malta	
NL	Netherlands	
NO	Norway	
PL	Poland	

Value	Definition	Short Description
PT	Portugal	
RO	Romania	
RS	Serbia	
SE	Sweden	
SI	Slovenia	
SK	Slovakia	
TR	Turkey	
XK	Kosovo	

4.2.2 Urban waste water treatment discharges codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.2.3 Storm overflows and urban discharges codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.2.4 Integrated Pollution Prevention and Control Installation codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.2.5 Non-Integrated Pollution Prevention and Control Installation codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.2.6 Fertiliser use codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.2.7 Pesticide use codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.2.8 Livestock codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.2.9 Transport and infrastructure codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.2.10 Water abstraction for public water supply codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.2.11 Water abstraction for industry codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.2.12 Water abstraction for irrigation codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.2.13 Water abstraction for cooling codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.2.14 Water flow regulation and morphological alterations codelist

Value	Definition	Short Description
Agriculture	Water flow regulation and morphological alterations due to agriculture.	
DamConstruction	Water flow regulation and morphological alterations due such as to dam construction due to flood protection.	

Value	Definition	Short Description
Hydropower	Water flow regulation and morphological alterations due to hydropower.	
Navigation	Water flow regulation and morphological alterations due to navigation.	

4.3 Codelists for **Nutrients, Organic Matter and General Physico-Chemical Determinands in Lakes - Aggregated Data** table

4.3.1 Country Code codelist

Value	Definition	Short Description
AL	Albania	
AT	Austria	
BA	Bosnia and Herzegovina	
BE	Belgium	
BG	Bulgaria	
CH	Switzerland	
CY	Cyprus	
CZ	Czech Republic	
DE	Germany	
DK	Denmark	
EE	Estonia	
ES	Spain	
FI	Finland	
FR	France	
GB	United Kingdom	
GR	Greece	
HR	Croatia	
HU	Hungary	
IE	Ireland	
IS	Iceland	
IT	Italy	
LI	Liechtenstein	
LT	Lithuania	
LU	Luxembourg	
LV	Latvia	
ME	Montenegro	
MK	Macedonia, the Former Yugoslav Republic of	
MT	Malta	
NL	Netherlands	
NO	Norway	
PL	Poland	
PT	Portugal	
RO	Romania	
RS	Serbia	
SE	Sweden	
SI	Slovenia	
SK	Slovakia	

Value	Definition	Short Description
TR	Turkey	
XK	Kosovo	

4.3.2 Aggregation Period codelist

Value	Definition	Short Description
Annual	Data aggregated over a year.	
Autumn	Data aggregated over autumn months (~ September, October, November).	
GrowingSeason	Data aggregated over the growing season for phytoplankton (normally April-October, but may vary among countries)	
Spring	Data aggregated over spring months (~ March, April, May).	
Summer	Data aggregated over summer months (~ June, July, August).	
Winter	Data aggregated over winter months (~ December, January, February).	

4.3.3 Name of Nutrients Determinand codelist

Value	Definition	Short Description
Alkalinity		
Ammonium		Preferred SoE Nutrients (Rivers, Lakes, TCM) CAS: 14798-03-9
BOD5	Biochemical Oxygen Demand (incubated for 5 days).	Preferred SoE Nutrients (Rivers, Lakes)
BOD7	Biochemical Oxygen Demand (incubated for 7 days).	Preferred SoE Nutrients (Rivers, Lakes)
Chlorophyll a		Preferred SoE Nutrients (TCM)
CODCr	Chemical Oxygen Demand (dichromate method).	
CODMn	Chemical Oxygen Demand (potassium permanganate method).	
Dissolved inorganic nitrogen		
Dissolved organic carbon		Preferred SoE Nutrients (Rivers, Lakes)
Dissolved oxygen		CAS: 7782-44-7
Electrical conductivity	The ability of water to lead electricity, and is proportional to the concentration of dissolved salts in the water sample. Most commonly measured with an electrode. Does not need to be measured in the exactly same sample as the nutrient.	
Hydrogen sulphide		
Kjeldahl Nitrogen		
Nitrate		Preferred SoE Nutrients (Rivers, Lakes, TCM) CAS: 14797-55-8

Value	Definition	Short Description
Nitrate to orthophosphate ratio		
Nitrite		CAS: 14797-65-0
Non-ionised ammonia		
Orthophosphates	Orthophosphate or Soluble Reactive Phosphate (SRP).	Preferred SoE Nutrients (Rivers, Lakes, TCM) CAS: 14265-44-2
Oxygen saturation		
Particulate organic nitrogen		
pH		
Secchi depth	Lakes and Seawater only	
Silicate		
Temperature (water)	Water temperature	
Total ammonium		Preferred SoE Nutrients (Rivers, Lakes, TCM) CAS: 14798-03-9
Total inorganic nitrogen		
Total nitrogen		
Total nitrogen to total phosphorus ratio		
Total organic carbon (TOC)		
Total organic nitrogen		
Total oxidised nitrogen	Nitrate + Nitrite	Preferred SoE Nutrients (Rivers, Lakes, TCM)
Total phosphorus		Preferred SoE Nutrients (Rivers, Lakes, TCM)

4.3.4 Unit of Measurement of Nutrients codelist

Value	Definition	Short Description
%	Oxygen Saturation	
m	Secchi Depth (Lakes and Seawater only)	
mg/l C	Total Organic Carbon, Dissolved Organic Carbon	
mg/l N	Ammonium, Dissolved Inorganic Nitrogen, Kjeldahl Nitrogen, Nitrate, Nitrite, Non-ionised Ammonia, Particulate Organic Nitrogen, Total Ammonium, Total Inorganic Nitrogen, Total Nitrogen, Total Organic Nitrogen, Total Oxidised Nitrogen	
mg/l O2	BOD5, BOD7, CODCr, CODMn, Dissolved Oxygen	
mg/l P	Orthophosphates, Total Phosphorus	
mg/l S	Hydrogen Sulphide	
mg/l Si	Silicate	
mmol/l	Alkalinity	
pH	pH	

Value	Definition	Short Description
ratio	Nitrate to Orthophosphate Ratio, Total Nitrogen to Total Phosphorus Ratio	
°C	degrees Celsius (Temperature)	
µg/l	Chlorophyll a	
µS/cm	Electrical Conductivity. If original unit is mS/m, you must multiply by 10 to get convert to µS/cm.	

4.3.5 CEN/ISO codelist

Value	Definition	Short Description
EN 12260:2003	Water quality - Determination of nitrogen - Determination of bound nitrogen (TNb), following oxidation to nitrogen oxides	
EN 12338:1998	Water quality - Determination of mercury - Enrichment methods by amalgamation	
EN 1233:1996	Water quality - Determination of chromium - Atomic absorption spectrometric methods	
EN 12673:1998	Water quality - Gas chromatographic determination of some selected chlorophenols in water	
EN 12918:1999	Water quality - Determination of parathion, parathion-methyl and some other organophosphorus compounds in water by dichloromethane extraction and gas chromatographic analysis	
EN 13506:2001	Water quality - Determination of mercury by atomic fluorescence spectrometry	
EN 14207:2003	Water quality - Determination of epichlorohydrin	
EN 1483:2007	Water quality - Determination of mercury - Method using atomic absorption spectrometry	
EN 1484:1997	Water analysis - Guidelines for the determination of total organic carbon (TOC) and dissolved organic carbon (DOC)	
EN 14996:2006	Water quality - Guidance on assuring the quality of biological and ecological assessments in the aquatic environment	
EN 1899-1:1998	Water quality - Determination of biochemical oxygen demand after n days (BODn) - Part 1: Dilution and seeding method with allylthiourea addition (ISO 5815:1989, modified)	
EN 1899-2:1998	Water quality - Determination of biochemical oxygen demand after n days (BODn) - Part 2: Method for undiluted samples (ISO 5815:1989, modified)	
EN 25663:1993	Water quality - Determination of Kjeldahl nitrogen - Method after mineralization with selenium (ISO 5663:1984)	
EN 25813:1992	Water quality - Determination of dissolved oxygen - Iodometric method (ISO 5813:1983)	
EN 25814:1992	Water quality - Determination of dissolved oxygen - Electrotechnical probe method (ISO 5814:1990)	
EN 26595:1992	Water quality - Determination of total arsenic - Silver diethyldithiocarbamate spectrophotometric method (ISO 6595:1982)	

Value	Definition	Short Description
EN 26595:1992/AC:1992	Water quality - Determination of total arsenic - Silver diethyldithiocarbamate spectrophotometric method (ISO 6595:1982)	
EN 26777:1993	Water quality - Determination of nitrite - Molecular nitrite absorption spectrometric method (ISO 6777:1984)	
EN 27888:1993	Water quality - Determination of electrical conductivity (ISO 7888:1985)	
EN 872:2005	Water quality - Determination of suspended solids - Method by filtration through glass fibre filters	
EN ISO 10301:1997	Water quality - Determination of highly volatile halogenated hydrocarbons - Gas-chromatographic methods (ISO 10301:1997)	
EN ISO 10304-1:1995	Water quality - Determination of dissolved fluoride, chloride, nitrite, orthophosphate, bromide, nitrate and sulfate ions, using liquid chromatography of ions - Part 1: Method for water with low contamination (ISO 10304-1:1992)	
EN ISO 10304-2:1996	Water quality - Determination of dissolved anions by liquid chromatography of ions - Part 2: Determination of bromide, chloride, nitrate, nitrite, orthophosphate and sulfate in waste water (ISO 10304-2:1995)	
EN ISO 10304-3:1997	Water quality - Determination of dissolved anions by liquid chromatography of ions - Part 3: Determination of chromate, iodide, sulfite, thiocyanate and thiosulfate (ISO 10304-3:1997)	
EN ISO 10304-4:1999	Water quality - Determination of dissolved anions by liquid chromatography of ions - Part 4: Determination of chlorate, chloride and chlorite in water with low contamination (ISO 10304-4:1997)	
EN ISO 10695:2000	Water quality - Determination of selected organic nitrogen and phosphorus compounds - Gas chromatographic methods (ISO 10695:2000)	
EN ISO 11732:2005	Water quality - Determination of ammonium nitrogen - Method by flow analysis (CFA and FIA) and spectrometric detection (ISO 11732:2005)	
EN ISO 11885:1997	Water quality - Determination of 33 elements by inductively coupled plasma atomic emission spectroscopy (ISO 11885:1996)	
EN ISO 11905-1:1998	Water quality - Determination of nitrogen - Part 1: Method using oxidative digestion with peroxodisulfate (ISO 11905-1:1997)	
EN ISO 11969:1996	Water quality - Determination of arsenic - Atomic absorption spectrometric method (hydride technique) (ISO 11969:1996)	
EN ISO 12020:2000	Water quality - Determination of aluminium - Atomic absorption spectrometric methods (ISO 12020:1997)	
EN ISO 13395:1996	Water quality - Determination of nitrite nitrogen and nitrate nitrogen and the sum of both by flow analysis (CFA and FIA) and spectrometric detection (ISO 13395:1996)	
EN ISO 14402:1999	Water quality - Determination of phenol index by flow analysis (FIA and CFA)(ISO 14402:1999)	

Value	Definition	Short Description
EN ISO 14403:2002	Water quality - Determination of total cyanide and free cyanide by continuous flow analysis (ISO 14403:2002)	
EN ISO 14911:1999	Water quality - Determination of dissolved Li+, Na+, NH4+, K+, Mn2+, Ca2+, Mg2+, Sr2+ and Ba2+ using ion chromatography - Method for water and waste water (ISO 14911:1998)	
EN ISO 15061:2001	Water quality - Determination of dissolved bromate - Method by liquid chromatography of ions (ISO 15061:2001)	
EN ISO 15586:2003	Water quality - Determination of trace elements using atomic absorption spectrometry with graphite furnace (ISO 15586:2003)	
EN ISO 15680:2003	Water quality - Gas-chromatographic determination of a number of monocyclic aromatic hydrocarbons, naphthalene and several chlorinated compounds using purge-and-trap and thermal desorption (ISO 15680:2003)	
EN ISO 15681-1:2004	Water quality - Determination of orthophosphate and total phosphorus contents by flow analysis (FIA and CFA) - Part 1: Method by flow injection analysis (FIA) (ISO 15681-1:2003)	
EN ISO 15681-2:2004	Water quality - Determination of orthophosphate and total phosphorus contents by flow analysis (FIA and CFA) - Part 2: Method by continuous flow analysis (CFA) (ISO 15681-2:2003)	
EN ISO 15682:2001	Water quality - Determination of chloride by flow analysis (CFA and FIA) and photometric or potentiometric detection (ISO 15682:2000)	
EN ISO 15913:2003	Water quality - Determination of selected phenoxyalkanoic herbicides, including bentazones and hydroxybenzonitriles by gas chromatography and mass spectrometry after solid phase extraction and derivatization (ISO 15913:2000)	
EN ISO 17294-1:2006	Water quality - Application of inductively coupled plasma mass spectrometry (ICP-MS) - Part 1: General guidelines (ISO 17294-1:2004)	
EN ISO 17294-2:2004	Water quality - Application of inductively coupled plasma mass spectrometry (ICP-MS) - Part 2: Determination of 62 elements (ISO 17294-2:2003)	
EN ISO 17353:2005	Water quality - Determination of selected organotin compounds - Gas chromatographic method (ISO 17353:2004)	
EN ISO 17495:2003	Water quality - Determination of selected nitrophenols - Method by solid-phase extraction and gas chromatography with mass spectrometric detection (ISO 17495:2001)	
EN ISO 17993:2003	Water quality - Determination of 15 polycyclic aromatic hydrocarbons (PAH) in water by HPLC with fluorescence detection after liquid-liquid extraction (ISO 17993:2002)	
EN ISO 18412:2006	Water quality - Determination of chromium(VI) - Photometric method for weakly contaminated water (ISO 18412:2005)	
EN ISO 18856:2005	Water quality - Determination of selected phthalates using gas chromatography/mass spectrometry (ISO 18856:2004)	

Value	Definition	Short Description
EN ISO 18857-1:2006	Water quality - Determination of selected alkylphenols - Part 1: Method for non-filtered samples using liquid-liquid extraction and gas chromatography with mass selective detection (ISO 18857-1:2005)	
EN ISO 23631:2006	Water quality - Determination of dalapon, trichloroacetic acid and selected haloacetic acids - Method using gas chromatography (GC-ECD and/or GC-MS detection) after liquid-liquid extraction and derivatization (ISO 23631:2006)	
EN ISO 23631:2006/AC:2007	Water quality - Determination of dalapon, trichloroacetic acid and selected haloacetic acids - Method using gas chromatography (GC-ECD and/or GC-MS detection) after liquid-liquid extraction and derivatization (ISO 23631:2006)	
EN ISO 5667-1:2006	Water quality - Sampling - Part 1: Guidance on the design of sampling programmes and sampling techniques (ISO 5667-1:2006)	
EN ISO 5667-1:2006/AC:2007	Water quality - Sampling - Part 1: Guidance on the design of sampling programmes and sampling techniques (ISO 5667-1:2006)	
EN ISO 5667-3:2003	Water quality - Sampling - Part 3: Guidance on the preservation and handling of water samples (ISO 5667-3:2003)	
EN ISO 5961:1995	Water quality - Determination of cadmium by atomic absorption spectrometry (ISO 5961:1994)	
EN ISO 6468:1996	Water quality - Determination of certain organochlorine insecticides, polychlorinated biphenyls and chlorobenzenes - Gas chromatographic method after liquid-liquid extraction (ISO 6468:1996)	
EN ISO 6878:2004	Water quality - Determination of phosphorus - Ammonium molybdate spectrometric method (ISO 6878:2004)	
EN ISO 7027:1999	Water quality - Determination of turbidity (ISO 7027:1999)	
EN ISO 7887:1994	Water quality - Examination and determination of colour (ISO 7887:1994)	
EN ISO 7980:2000	Water quality - Determination of calcium and magnesium - Atomic absorption spectrometric method (ISO 7980:1986)	
EN ISO 9377-2:2000	Water quality - Determination of hydrocarbon oil index - Part 2: Method using solvent extraction and gas chromatography (ISO 9377-2:2000)	
EN ISO 9562:2004	Water quality - Determination of adsorbable organically bound halogens (AOX) (ISO 9562:2004)	
EN ISO 9963-1:1995	Water quality - Determination of alkalinity - Part 1: Determination of total and composite alkalinity (ISO 9963-1:1994)	
EN ISO 9963-2:1995	Water quality - Determination of alkalinity - Part 2: Determination of carbonate alkalinity (ISO 9963-2:1994)	

4.4 Codelists for Hazardous Substances and Other Chemical Determinands in Lakes - Aggregated Data table

4.4.1 Country Code codelist

Value	Definition	Short Description
AL	Albania	
AT	Austria	
BA	Bosnia and Herzegovina	
BE	Belgium	
BG	Bulgaria	
CH	Switzerland	
CY	Cyprus	
CZ	Czech Republic	
DE	Germany	
DK	Denmark	
EE	Estonia	
ES	Spain	
FI	Finland	
FR	France	
GB	United Kingdom	
GR	Greece	
HR	Croatia	
HU	Hungary	
IE	Ireland	
IS	Iceland	
IT	Italy	
LI	Liechtenstein	
LT	Lithuania	
LU	Luxembourg	
LV	Latvia	
ME	Montenegro	
MK	Macedonia, the Former Yugoslav Republic of	
MT	Malta	
NL	Netherlands	
NO	Norway	
PL	Poland	
PT	Portugal	
RO	Romania	
RS	Serbia	
SE	Sweden	
SI	Slovenia	
SK	Slovakia	
TR	Turkey	
XK	Kosovo	

4.4.2 Unit of Measurement of Hazardous Substances codelist

Value	Definition	Short Description
Bq	Becquerels (radionuclides)	
mg/g	miligrammes per gram	
mg/kg	miligrammes per kilogram	
mg/l	miligrammes per liter	
ng/g	nanogrammes per gram	
ng/kg	nanogrammes per kilogram	
ng/l	nanogrammes per liter	
µg/g	microgrammes per gram	
µg/kg	microgrammes per kilogram	
µg/l	microgrammes per liter	

4.4.3 Chemical Abstract Service Number codelist

Value	Definition	Short Description
100-02-7	Nitrophenol	Preferred SoE Haz.Subst. [µg/l]
100-41-4	Ethylbenzene	[µg/l]
100-42-5	Styrene	[µg/l]
1002-53-5	Dibutyltin	[µg/l]
10028-17-8	Tritium	[µg/l]
10061-01-5	c-1,3-dichloropropene	[µg/l]
10061-02-6	t-1,3-dichloropropene	[µg/l]
1007-28-9	Desisopropylatrazine	[µg/l]
101-55-3	4-bromophenyl phenyl ether	[µg/l]
1014-69-3	Desmetryn	[µg/l]
1024-57-3	Heptachloroepoxide	Preferred SoE Haz.Subst. [µg/l]
10265-92-6	Methamidophos	[µg/l]
103-65-1	n-propylbenzene	[µg/l]
104-35-8	4-nonylphenol mono-ethoxylate (NP1EO)	[µg/l]
104-40-5	4-nonylphenol	Preferred SoE Haz.Subst. [µg/l]
104-51-8	n-butylbenzene	[µg/l]
105-67-9	2,4-dimethyl-phenol	[µg/l]
106-42-3	P-xylene	[µg/l]
106-43-4	4-chlorotoluene	[µg/l]
106-44-4	4-methyl-phenol	[µg/l]
106-44-5	P-cresol	[µg/l]
106-46-7	1,4-dichlorobenzene	[µg/l]
106-93-4	1,2-dibromoethane	[µg/l]
1066-51-9	Aminomethylphosphonic acid (AMPA)	[µg/l]
107-06-2	1,2-dichloroethane	Preferred SoE Haz.Subst. [µg/l]
107-13-1	Acrylonitrile	[µg/l]
107-46-0	Hexamethyldisiloxane (HMDS)	[µg/l]
1070-78-6	1,1,1,3-tetrachloropropane	[µg/l]
1071-83-6	Glyphosate	[µg/l]
108-38-3	M-xylene	[µg/l]
108-67-8	1,3,5-trimethylbenzene	[µg/l]
108-70-3	1,3,5-trichlorobenzene	[µg/l]
108-86-1	Bromobenzene	[µg/l]
108-88-3	Toluene	Preferred SoE Haz.Subst. [µg/l]

Value	Definition	Short Description
108-90-7	Chlorobenzene	[μg/l]
108-95-2	Phenol	[μg/l]
1113-02-6	Omethoate	[μg/l]
112410-23-8	Tebufenozide	[μg/l]
115-29-7	Endosulfan	[μg/l]
115-32-2	Dicofol	Preferred SoE Haz.Subst. [μg/l]
1163-19-5	Bis(pentabromophenyl) ether	[μg/l]
117-81-7	Di (2-ethylhexyl) phthalate (DEHP)	Preferred SoE Haz.Subst. [μg/l]
118-74-1	Hexachlorobenzene (HCB)	Preferred SoE Haz.Subst. [μg/l]
118-96-7	2,4,6-trinitrotoluene	[μg/l]
1194-65-6	Dichlobenil	[μg/l]
120-12-7	Anthracene	Preferred SoE Haz.Subst. [μg/l]
120-36-5	Dichlorprop (2,4-DP)	[μg/l]
120-82-1	1,2,4-trichlorobenzene	[μg/l]
120-83-2	2,4-dichlorophenol	[μg/l]
12002-48-1	Trichlorobenzenes	Preferred SoE Haz.Subst. [μg/l]
120928-09-8	Fenazaquin	[μg/l]
121-14-2	2,4-dinitrotoluene	[μg/l]
121-75-5	Malathion	[μg/l]
122-14-5	Fenitrothion	[μg/l]
122-34-9	Simazine	Preferred SoE Haz.Subst. [μg/l]
123-33-1	Maleinhydrazid	[μg/l]
124-48-1	Dibromochloromethane	[μg/l]
124495-18-7	Quinoxyfen	Preferred SoE Haz.Subst. [μg/l]
127-18-4	1,1,2,2-tetrachloroethene	Preferred SoE Haz.Subst. [μg/l]
12767-79-2	Aroclor	[μg/l]
129-00-0	Pyrene	[μg/l]
13071-79-9	Terbufos	[μg/l]
131-11-3	Dimethyl phthalate	[μg/l]
131-16-8	Dipropyl phthalate	[μg/l]
131-18-0	Dipentyl phthalate	[μg/l]
1321-64-8	Pentachloronaphthalene	[μg/l]
1321-65-9	Trichloronaphthalene	[μg/l]
133-06-2	Captan	[μg/l]
133-53-9	3,5-dimethyl-phenol	[μg/l]
1330-20-7	Xylene	[μg/l]
1335-87-1	Hexachloronaphthalene	[μg/l]
1335-88-2	Tetrachloronaphthalene	[μg/l]
13351-73-0	Tolyltriazole	Preferred SoE Haz.Subst. [μg/l]
13356-08-6	Fenbutatin oxide	[μg/l]
1336-36-3	Polychlorinated biphenyls	[μg/l]
133855-98-8	Epoxiconazole	[μg/l]
135-19-3	2-naphthol	[μg/l]
135-98-8	sec-butylbenzene	[μg/l]
136-85-6	Methylbenzotriazol	Preferred SoE Haz.Subst. [μg/l]
136426-54-5	Fluquinconazole	[μg/l]
136677-10-6	Polychlorinated dibenzofurans (PCDF)	[μg/l]
13684-56-5	Desmedipham	[μg/l]

Value	Definition	Short Description
137-26-8	Thiram	[µg/l]
137-30-4	Ziram	[µg/l]
139-13-9	NTA	[µg/l]
139-40-2	Propazine	[µg/l]
140-57-8	Aramite	[µg/l]
140-66-9	Para-tert-octylphenol	Preferred SoE Haz.Subst. [µg/l]
142-28-9	1,3-dichloropropane	[µg/l]
143-50-0	Chlordecone	[µg/l]
144-49-0	Fluoroacetic acid	[µg/l]
151-21-3	Sodium dodecyl sulfate	[µg/l]
15165-67-0	Dichlorprop-P	[µg/l]
15307-86-5	Diclofenac	Preferred SoE Haz.Subst. [µg/l]
156-52-9	c-1,2-dichloroethene	[µg/l]
156-59-2	Cis-1,2-dichloroethene	[µg/l]
156-60-5	Trans 1,2-dichloroethene	[µg/l]
1563-66-2	Carbofuran	[µg/l]
15687-27-1	Ibuprofen	Preferred SoE Haz.Subst. [µg/l]
1570-64-5	4-chloro-2-methylphenol	[µg/l]
1570-65-6	4,6-dichloro-2-methylphenol	[µg/l]
1582-09-8	Trifluralin	Preferred SoE Haz.Subst. [µg/l]
15972-60-8	Alachlor	Preferred SoE Haz.Subst. [µg/l]
1610-18-0	Prometon	[µg/l]
1634-04-4	MTBE	[µg/l]
16478-18-5	Pentachloroiodobenzene	[µg/l]
16484-77-8	Mecoprop-P (MCPP-P)	[µg/l]
16655-82-6	3-hydroxycarbofuran	[µg/l]
16672-87-0	2-chloroethylphosphonic acid	[µg/l]
16752-77-5	Methomyl	[µg/l]
1689-83-4	Ioxynil	[µg/l]
1689-84-5	Bromoxynil	[µg/l]
1689-99-2	Bromoxynil octanoate	[µg/l]
1698-60-8	Chloridazon	[µg/l]
1702-17-6	Clopyralid	[µg/l]
17040-19-6	Demeton-S-methylsulfon	[µg/l]
1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	[µg/l]
1763-23-1	PFOS and its derivatives	Preferred SoE Haz.Subst. [µg/l]
1806-26-4	4-octylphenol	[µg/l]
18181-70-9	Iodofenphos	[µg/l]
182346-21-0	2,2',3,4,4'-pentabromodiphenyl ether (BDE85)	[µg/l]
1825-21-4	Pentachloroanisole	[µg/l]
182677-30-1	2,2',3,4,4',5'-hexabromodiphenyl ether (BD(E)138)	[µg/l]
1836-75-5	Nitrophen	[µg/l]
1861-40-1	Benfluralin	[µg/l]
189084-64-8	PBDE100 (2,2',4,4',6-pentabromodiphenyl ether)	[µg/l]
191-24-2	Benzo(g,h,i)perylene	Preferred SoE Haz.Subst. [µg/l]
1912-24-9	Atrazine	Preferred SoE Haz.Subst. [µg/l]
1918-00-9	Dicamba	[µg/l]

Value	Definition	Short Description
1918-13-4	Chlorthiamid	[µg/l]
193-39-5	Indeno(1,2,3-cd)pyrene	Preferred SoE Haz.Subst. [µg/l]
2008-58-4	2,6-dichlorobenzamide	[µg/l]
20427-84-3	4-nonylphenol di-ethoxylate (NP2EO)	[µg/l]
20461-54-5	Iodide	[µg/l]
205-99-2	Benzo(b)fluoranthene	Preferred SoE Haz.Subst. [µg/l]
2051-24-3	5,5',6,6'-decachlorobiphenyl (CB209)	[µg/l]
206-44-0	Fluoranthene	Preferred SoE Haz.Subst. [µg/l]
207-08-9	Benzo(k)fluoranthene	Preferred SoE Haz.Subst. [µg/l]
207122-15-4	PBDE154 (2,2',4,4',5,6'-hexabromodiphenyl ether)	[µg/l]
208-96-8	Acenaphthylene	[µg/l]
2104-64-5	O-Ethyl O-(p-nitrophenyl) phenylphosphonothiolate	[µg/l]
21087-64-9	Metribuzin	[µg/l]
2163-68-0	Hydroxyatrazine	[µg/l]
2164-08-1	Lenacil	[µg/l]
21725-46-2	Cyanazine	[µg/l]
218-01-9	Chrysene	[µg/l]
22204-53-1	Naproxen	Preferred SoE Haz.Subst. [µg/l]
2227-13-6	Tetrasul	[µg/l]
2234-13-1	Octachloronaphthalene	[µg/l]
2310-17-0	Phosalone	[µg/l]
23103-98-2	Pirimicarb	[µg/l]
23593-75-1	Clotrimazole	[µg/l]
2385-85-5	Mirex	[µg/l]
23950-58-5	Propyzamide	[µg/l]
2440-02-0	Heptachloronorbornene	[µg/l]
24959-67-9	Bromide	[µg/l]
25057-89-0	Bentazone	[µg/l]
25140-90-3	2-(2,6-dichlorophenoxy)propionic acid (2,6-DCPP)	[µg/l]
25154-52-3	Nonylphenol	[µg/l]
25167-83-3	Tetrachlorophenols	[µg/l]
2599-11-3	Hydroxysimazine	[µg/l]
262-12-4	Dibenzodioxin	[µg/l]
26225-79-6	Ethofumesate	[µg/l]
26259-45-0	Secbumeton	[µg/l]
28159-98-0	Cybutryne	Preferred SoE Haz.Subst. [µg/l]
29122-68-7	Atenolol	Preferred SoE Haz.Subst. [µg/l]
2921-88-2	Chlorpyrifos	Preferred SoE Haz.Subst. [µg/l]
294-62-2	Cyclododecane	[µg/l]
297-78-9	Isobenzan	[µg/l]
298-00-0	Parathion-methyl	[µg/l]
298-46-4	Carbamazepin	Preferred SoE Haz.Subst. [µg/l]
30125-63-4	Desethylterbuthylazine	[µg/l]
309-00-2	Aldrin	Preferred SoE Haz.Subst. [µg/l]
3115-49-9	Nonylphenoxyacetic acid (NPE1C)	Preferred SoE Haz.Subst. [µg/l]
314-40-9	Bromacil	[µg/l]

Value	Definition	Short Description
31508-00-6	PCB118	[µg/l]
319-84-6	Alpha-HCH	[µg/l]
319-85-7	Beta-HCH	[µg/l]
319-86-8	Delta-HCH	[µg/l]
3194-55-6	Hexabromocyclododecane (HBCDD)	Preferred SoE Haz.Subst. [µg/l]
32241-08-0	Heptachloronaphthalene	[µg/l]
32534-81-9	Diphenyl ether, pentabromo derivative	[µg/l]
32536-52-0	Diphenyl ether, octabromo deviate	[µg/l]
32598-13-3	PCB77	[µg/l]
32598-14-4	PCB105 (2,3,3',4,4'-pentachlorobiphenyl)	[µg/l]
32774-16-6	PCB169	[µg/l]
330-54-1	Diuron	Preferred SoE Haz.Subst. [µg/l]
330-55-2	Linuron	Preferred SoE Haz.Subst. [µg/l]
3307-39-9	2-(4-chlorophenoxy)propionic acid (4-CPP)	[µg/l]
33213-65-9	Beta-Endosulfan	[µg/l]
333-41-5	Diazinon	Preferred SoE Haz.Subst. [µg/l]
335-67-1	PFOA	Preferred SoE Haz.Subst. [µg/l]
33693-04-8	Terbumeton	[µg/l]
3397-62-4	Deisopropyldeethylatrazine	[µg/l]
34123-59-6	Isoproturon	Preferred SoE Haz.Subst. [µg/l]
3424-82-6	DDE, o,p'	[µg/l]
34256-82-1	Acetochlor	[µg/l]
35065-27-1	PCB153 (2,2',4,4',5,5'-hexachlorobiphenyl)	[µg/l]
35065-28-2	PCB138 (2,2',3,4,4',5'-hexachlorobiphenyl)	[µg/l]
35065-29-3	PCB180 (2,2',3,4,4',5,5'-heptachlorobiphenyl)	[µg/l]
35065-30-6	PCB170 (1,2,3,4-tetrachloro-5-(2,3,4-trichlorophenyl)benzene)	[µg/l]
35693-99-3	PCB52 (2,2',5,5'-tetrachlorobiphenyl)	[µg/l]
35694-08-7	PCB194 (1,2,3,4-tetrachloro-5-(2,3,4,5-tetrachlorophenyl)benzene)	[µg/l]
36065-30-2	2,4,6-tribromophenyl 2-methyl-2,3-dibromopropyl ether	[µg/l]
36355-01-8	Hexabromobiphenyl	[µg/l]
36643-28-4	Tributyltin cation	Preferred SoE Haz.Subst. [µg/l]
37350-58-6	Metoprolol	Preferred SoE Haz.Subst. [µg/l]
37680-73-2	PCB101 (2,2',4,5,5'-pentachlorobiphenyl)	[µg/l]
38380-08-4	PCB156 (2,3,3',4,4',5-hexachlorobiphenyl)	[µg/l]
39635-31-9	PCB189 (1,2,3,4-tetrachloro-5-(3,4,5-trichlorophenyl)benzene)	[µg/l]
39765-80-5	Nonachlor-trans	[µg/l]
40487-42-1	Pendimethalin	[µg/l]
41318-75-6	PBDE28	[µg/l]
41394-05-2	Metamitron	[µg/l]
41859-67-0	Bezafibrate	Preferred SoE Haz.Subst. [µg/l]
4234-79-1	Kelevan	[µg/l]
42576-02-3	Bifenox	Preferred SoE Haz.Subst. [µg/l]
4636-83-3	Morfamquat	[µg/l]
465-73-6	Isodrin	Preferred SoE Haz.Subst. [µg/l]
470-90-6	Chlorfenvinphos	Preferred SoE Haz.Subst. [µg/l]
4901-51-3	2,3,4,5-tetrachlorophenol	[µg/l]

Value	Definition	Short Description
4904-61-4	1,5,9-cyclododecatriene	[µg/l]
50-00-0	Formaldehyde	[µg/l]
50-28-2	17beta-estradiol	Preferred SoE Haz.Subst. [µg/l]
50-29-3	DDT, p,p'	Preferred SoE Haz.Subst. [µg/l]
50-30-6	2,6-dichlorobenzoic acid	[µg/l]
50-32-8	Benzo(a)pyrene	Preferred SoE Haz.Subst. [µg/l]
51000-52-3	Vinyl neodecanoate	[µg/l]
512-04-9	Diosgenin	[µg/l]
51218-45-2	Metolachlor	[µg/l]
51235-04-2	Hexazinone	[µg/l]
52236-30-3	Desamino-diketo-metribuzin	[µg/l]
52315-07-8	Cypermethrin	Preferred SoE Haz.Subst. [µg/l]
526-75-0	2,3-dimethyl-phenol	[µg/l]
52645-53-1	Permethrin	[µg/l]
52663-72-6	PCB167 (1,2,3-trichloro-5-(2,4,5-trichlorophenyl)benzene)	[µg/l]
53-19-0	DDD, o,p'	[µg/l]
53-70-3	Dibenzo(a,h)anthracene	[µg/l]
534-52-1	Dinitro-o-cresol (DNOC)	[µg/l]
540-59-0	1,2-dichloroethene	[µg/l]
541-73-1	1,3-dichlorobenzene	[µg/l]
5436-43-1	PBDE47 (2,2',4,4'-tetrabromodiphenyl ether)	[µg/l]
55512-33-9	Pyridate	[µg/l]
55525-54-7	3,3'-(ureylenedimethylene)bis(3,5,5'-trimethylcyclohexyl) diisocyanate	[µg/l]
5598-13-0	Chlorpyrifos-methyl	[µg/l]
56-23-5	Tetrachloromethane	Preferred SoE Haz.Subst. [µg/l]
56-38-2	Parathion	[µg/l]
56-55-3	Benzo(a)anthracene	[µg/l]
563-58-6	1,1-dichloropropene	[µg/l]
56507-37-0	Diketo-metribuzin	[µg/l]
56573-85-4	Tributyltin	[µg/l]
57-12-5	Cyanides (as total CN)	[µg/l]
57-63-6	17alpha-ethinylestradiol	Preferred SoE Haz.Subst. [µg/l]
57-74-9	Chlordane	[µg/l]
57465-28-8	PCB126 (1,2,3-trichloro-5-(3,4-dichlorophenyl)benzene)	[µg/l]
576-26-1	2,6-dimethyl-phenol	[µg/l]
57837-19-1	Metalaxyl	[µg/l]
58-08-2	Caffeine	Preferred SoE Haz.Subst. [µg/l]
58-89-9	Gamma-HCH (Lindane)	Preferred SoE Haz.Subst. [µg/l]
58-90-2	2,3,4,6-tetrachlorophenol	[µg/l]
59-50-7	3-methyl-4-chlorophenol	[µg/l]
5915-41-3	Terbuthylazine	[µg/l]
594-20-7	2,2-dichloropropane	[µg/l]
60-00-4	EDTA	[µg/l]
60-51-5	Dimethoate	[µg/l]
60-57-1	Dieldrin	Preferred SoE Haz.Subst. [µg/l]
60145-21-3	PCB103	[µg/l]

Value	Definition	Short Description
60207-90-1	Propiconazole	[µg/l]
603-35-0	Triphenylphosphine	[µg/l]
60328-60-9	PBDE99	[µg/l]
60348-60-9	2,2',4,4',5-pentabromodiphenyl ether (BDE99)	[µg/l]
608-73-1	Hexachlorocyclohexane (HCH)	[µg/l]
608-93-5	Pentachlorobenzene	Preferred SoE Haz.Subst. [µg/l]
6108-10-07	Epsilon-HCH	[µg/l]
6164-98-3	Chlordimeform	[µg/l]
6190-65-4	Desethylatrazine	[µg/l]
62-73-7	Dichlorvos	Preferred SoE Haz.Subst. [µg/l]
630-20-6	1,1,1,2-tetrachloroethane	[µg/l]
64902-72-3	Chlorsulfuron	[µg/l]
65510-44-3	PCB123 (1,2,3-trichloro-5-(2,4-dichlorophenyl)benzene)	[µg/l]
66753-07-9	Hydroxyterbuthylazine	[µg/l]
67-66-3	Trichloromethane	Preferred SoE Haz.Subst. [µg/l]
67129-08-2	Metazachlor	[µg/l]
67564-91-4	Fenpropimorph	[µg/l]
68631-49-2	PBDE153 (2,2',4,4',5,5'-hexabromodiphenyl ether)	[µg/l]
688-73-3	Tributyltin compounds	Preferred SoE Haz.Subst. [µg/l]
69782-90-7	PCB157 (1,2,3-trichloro-5-(2,3,4-trichlorophenyl)benzene)	[µg/l]
7012-37-5	PCB28 (2,4,4'-trichlorobiphenyl)	[µg/l]
70124-77-5	Flucythrinate	[µg/l]
70362-41-3	PCB106	[µg/l]
70362-50-4	PCB81 (3,4,4',5-tetrachlorobiphenyl)	[µg/l]
70630-17-0	Metalaxyl-M	[µg/l]
70776-03-3	Naphthalene, chloro derivatives	[µg/l]
7085-19-0	Mecoprop	Preferred SoE Haz.Subst. [µg/l]
71-43-2	Benzene	Preferred SoE Haz.Subst. [µg/l]
71-55-6	1,1,1-trichloroethane	[µg/l]
72-20-8	Endrin	Preferred SoE Haz.Subst. [µg/l]
72-43-5	Methoxychlor	[µg/l]
72-54-8	DDD, p,p'	Preferred SoE Haz.Subst. [µg/l]
72-55-9	DDE, p,p'	Preferred SoE Haz.Subst. [µg/l]
723-46-6	Sulfamethoxazol	Preferred SoE Haz.Subst. [µg/l]
7286-69-3	Sebuthylazine	[µg/l]
7287-19-6	Prometryn	[µg/l]
732-26-3	2,4,6-tri-tert-butylphenol	[µg/l]
738-70-5	Trimethoprim	Preferred SoE Haz.Subst. [µg/l]
74-83-9	Bromomethane	[µg/l]
74-95-3	Dibromomethane	[µg/l]
74-97-5	Bromochloromethane	[µg/l]
74070-46-5	Aclonifen	Preferred SoE Haz.Subst. [µg/l]
74233-64-6	Metsulfuronmethyl	[µg/l]
7429-90-5	Aluminium and its compounds	[µg/l]
7429-90-5_dissolved	Aluminium dissolved	[µg/l]
7439-89-6	Iron and its compounds	[µg/l]

Value	Definition	Short Description
7439-89-6_dissolved	Iron dissolved	[µg/l]
7439-92-1	Lead	Preferred SoE Haz.Subst. [µg/l]
7439-92-1_dissolved	Lead dissolved	Preferred SoE Haz.Subst. [µg/l]
7439-93-2	Lithium	[µg/l]
7439-95-4	Magnesium	[mg/l]
7439-96-5	Manganese and its compounds	[µg/l]
7439-96-5_dissolved	Manganese dissolved	[µg/l]
7439-97-6	Mercury	Preferred SoE Haz.Subst. [µg/l]
7439-97-6_dissolved	Mercury dissolved	Preferred SoE Haz.Subst. [µg/l]
7439-98-7	Molybdenum and its compounds	[µg/l]
7440-02-0	Nickel	Preferred SoE Haz.Subst. [µg/l]
7440-02-0_dissolved	Nickel dissolved	Preferred SoE Haz.Subst. [µg/l]
7440-09-7	Potassium	[mg/l]
7440-22-4	Silver	[µg/l]
7440-23-5	Sodium	[mg/l]
7440-24-6	Strontium	[µg/l]
7440-28-0	Thallium	[µg/l]
7440-31-5	Tin and its compounds	[µg/l]
7440-32-6	Titanium	[µg/l]
7440-33-7	Tungsten and its compounds	[µg/l]
7440-36-0	Antimony	[µg/l]
7440-38-2	Arsenic	Preferred SoE Haz.Subst. [µg/l]
7440-38-2_dissolved	Arsenic dissolved	Preferred SoE Haz.Subst. [µg/l]
7440-39-3	Barium	[µg/l]
7440-41-7	Beryllium	[µg/l]
7440-42-8	Boron	[µg/l]
7440-43-9	Cadmium	Preferred SoE Haz.Subst. [µg/l]
7440-43-9_dissolved	Cadmium dissolved	Preferred SoE Haz.Subst. [µg/l]
7440-47-3	Chromium	Preferred SoE Haz.Subst. [µg/l]
7440-47-3_dissolved	Chromium dissolved	Preferred SoE Haz.Subst. [µg/l]
7440-48-4	Cobalt and its compounds	[µg/l]
7440-50-8	Copper	Preferred SoE Haz.Subst. [µg/l]
7440-50-8_dissolved	Copper dissolved	Preferred SoE Haz.Subst. [µg/l]
7440-61-1	Uranium	[µg/l]
7440-62-2	Vanadium and its compounds	[µg/l]
7440-66-6	Zinc	Preferred SoE Haz.Subst. [µg/l]
7440-66-6_dissolved	Zinc dissolved	Preferred SoE Haz.Subst. [µg/l]
7440-70-2	Calcium	[mg/l]
74472-37-0	PCB114 (2,3,4,4',5-pentachlorobiphenyl)	[µg/l]
75-01-4	Chloroethene (vinylchloride)	[µg/l]
75-09-2	Dichloromethane	Preferred SoE Haz.Subst. [µg/l]

Value	Definition	Short Description
75-25-2	Bromoform	[µg/l]
75-27-4	Dichlorobromomethane	[µg/l]
75-34-3	1,1-dichloroethane	[µg/l]
75-35-4	1,1-dichloroethene	[µg/l]
75-69-4	Trichlorofluoromethane	[µg/l]
75-71-8	Dichlorodifluoromethane	[µg/l]
75-99-0	Dalapon	[µg/l]
76-03-9	Trichloroacetic acid	[µg/l]
76-44-8	Heptachlor	Preferred SoE Haz.Subst. [µg/l]
77-47-4	Hexachlorocyclopentadiene (HCCP)	[µg/l]
7782-41-4	Fluorine	[µg/l]
7782-49-2	Selenium and its compounds	[µg/l]
78-87-5	1,2-dichloropropane	[µg/l]
789-02-6	DDT, o,p'	Preferred SoE Haz.Subst. [µg/l]
79-00-5	1,1,2-trichloroethane	[µg/l]
79-01-6	1,1,2-trichloroethene	Preferred SoE Haz.Subst. [µg/l]
79-34-5	1,1,2,2-tetrachloroethane	[µg/l]
79-94-7	Tetrabromobisphenol A (TBBP-A)	[µg/l]
793-24-8	4-(dimethylbutylamino) diphenylamin (6PPD)	[µg/l]
80-05-7	Bisphenol A	[µg/l]
8001-35-2	Toxaphene	[µg/l]
81-15-2	Musk xylene	[µg/l]
81103-11-9	Clarithromycin	Preferred SoE Haz.Subst. [µg/l]
82-68-8	Quintozene	[µg/l]
83-32-9	Acenaphthene	[µg/l]
834-12-8	Ametryn	[µg/l]
83905-01-5	Azitromycin	Preferred SoE Haz.Subst. [µg/l]
84-66-2	Di-ethyl phthalate	[µg/l]
84-69-5	Di-iso-butyl phthalate	[µg/l]
84-74-2	Di-(n-butyl) phthalate	[µg/l]
84852-15-3	4-nonylphenol, branched	[µg/l]
85-01-8	Phenanthrene	[µg/l]
85-22-3	Pentabromoethylbenzene	[µg/l]
85-68-7	Butyl benzyl phthalate (BBP)	[µg/l]
85535-84-8	Chloroalkanes C10-13	Preferred SoE Haz.Subst. [µg/l]
85540-50-1	6-chloro-2-dimethylphenol	[µg/l]
86-73-7	Fluorene	[µg/l]
87-61-6	1,2,3-trichlorobenzene	[µg/l]
87-65-0	2,6-dichlorophenol	[µg/l]
87-68-3	Hexachlorobutadiene (HCBD)	Preferred SoE Haz.Subst. [µg/l]
87-86-5	Pentachlorophenol	Preferred SoE Haz.Subst. [µg/l]
88-06-2	2,4,6-trichlorophenol	[µg/l]
88-85-7	Dinoseb	[µg/l]
886-50-0	Terbutryn	Preferred SoE Haz.Subst. [µg/l]
90-12-0	1-methylnaphthalene	[µg/l]
9016-45-9	Nonylphenolethoxylate	[µg/l]
91-20-3	Naphthalene	Preferred SoE Haz.Subst. [µg/l]
91-57-6	2-methylnaphthalene	[µg/l]

Value	Definition	Short Description
919-86-8	Demeton-S-methyl	[µg/l]
93-72-1	Fenoprop	[µg/l]
93-76-5	2,4,5-T	[µg/l]
94-74-6	MCPA	Preferred SoE Haz.Subst. [µg/l]
94-75-7	2,4-D	[µg/l]
94-81-5	MCPB	[µg/l]
94-82-6	2,4-DB	[µg/l]
95-14-7	Benzotriazol	Preferred SoE Haz.Subst. [µg/l]
95-47-6	O-xylene	[µg/l]
95-48-7	2-methyl-phenol	[µg/l]
95-49-8	2-chlorotoluene	[µg/l]
95-50-1	1,2-dichlorobenzene	[µg/l]
95-63-6	1,2,4-trimethylbenzene	[µg/l]
95-65-8	3,4-dimethyl-phenol	[µg/l]
95-87-4	2,5-dimethylphenol	[µg/l]
95-95-4	2,4,5-trichlorophenol	[µg/l]
959-98-8	Alpha-Endosulfan	Preferred SoE Haz.Subst. [µg/l]
96-12-8	1,2-dibromo-3-chloropropane	[µg/l]
96-18-4	1,2,3-trichloropropane	[µg/l]
96-45-7	Ethylenethiourea (ETU)	[µg/l]
98-06-6	tert-butylbenzene	[µg/l]
98-51-1	4-tert-butyltoluene	[µg/l]
98-82-8	Isopropylbenzene	[µg/l]
99-87-6	4-isopropyltoluene	[µg/l]
no CAS 1	Adsorbable organic halogens (AOX)	[µg/l]
no CAS 10	Radionuclides	[µg/l]
no CAS 11	Chrysene+Triphenylene (sum)	[µg/l]
no CAS 12	DDT + DDE + DDD total = (DDT, o,p' + DDT, p,p' + DDE, o,p' + DDE, p,p' + DDD, o,p' + DDD, p,p')	[µg/l]
no CAS 13	Polyaromatic hydro-carbons (PAH) (sum)	[µg/l]
no CAS 14	PAH excl Bicycl (sum)	[µg/l]
no CAS 15	PCB (sum)	[µg/l]
no CAS 16	PCB7 (sum)	[µg/l]
no CAS 17	TCDD (dioxins and furans)	[µg/l]
no CAS 18	Total PCBs	[µg/l]
no CAS 19	Brominated diphenylethers	[µg/l]
no CAS 2	Brominated flame retardants	[µg/l]
no CAS 20	DDD (TDE) sum = (DDD, o,p' + DDD, p,p')	[µg/l]
no CAS 21	DDE sum = (DDE, o,p' + DDE, p,p')	[µg/l]
no CAS 22	DDT sum = (DDT, o,p' + DDT, p,p')	[µg/l]
no CAS 23	DDT total according Directive 2008/105/EC = (DDT, o,p' + DDT, p,p' + DDE, p,p' + DDD, p,p')	[µg/l]
no CAS 24	Dichlorobenzene	[µg/l]
no CAS 25	Dichlorophenol	[µg/l]
no CAS 26	Chloride	[mg/l]
no CAS 27	Chlorine Cl-	[mg/l]
no CAS 28	Chromium 3+	[µg/l]
no CAS 29	Chromium 6+	[µg/l]

Value	Definition	Short Description
no CAS 3	Detergents	[µg/l]
no CAS 30	Pesticides (sum)	[µg/l]
no CAS 32	Sulphate	[mg/l]
no CAS 33	Volatile organic halogens (VOX)	[µg/l]
no CAS 34	Phenols	[µg/l]
no CAS 36	meta + para xylene	[µg/l]
no CAS 4	Extractable organically bound chlorine	[µg/l]
no CAS 5	Extractable persistent organically bound chlorine	[µg/l]
no CAS 6	Hydrocarbons	[µg/l]
no CAS 8	PCB Total (congeners 28, 52, 101, 118, 138, 153, 180)	[µg/l]
no CAS 9	Polychlorinated dibenzodioxins (PCDD)	[µg/l]

4.4.4 CEN/ISO codelist

Value	Definition	Short Description
EN 12260:2003	Water quality - Determination of nitrogen - Determination of bound nitrogen (TNb), following oxidation to nitrogen oxides	
EN 12338:1998	Water quality - Determination of mercury - Enrichment methods by amalgamation	
EN 1233:1996	Water quality - Determination of chromium - Atomic absorption spectrometric methods	
EN 12673:1998	Water quality - Gas chromatographic determination of some selected chlorophenols in water	
EN 12918:1999	Water quality - Determination of parathion, parathion-methyl and some other organophosphorus compounds in water by dichloromethane extraction and gas chromatographic analysis	
EN 13506:2001	Water quality - Determination of mercury by atomic fluorescence spectrometry	
EN 14207:2003	Water quality - Determination of epichlorohydrin	
EN 1483:2007	Water quality - Determination of mercury - Method using atomic absorption spectrometry	
EN 1484:1997	Water analysis - Guidelines for the determination of total organic carbon (TOC) and dissolved organic carbon (DOC)	
EN 14996:2006	Water quality - Guidance on assuring the quality of biological and ecological assessments in the aquatic environment	
EN 1899-1:1998	Water quality - Determination of biochemical oxygen demand after n days (BODn) - Part 1: Dilution and seeding method with allylthiourea addition (ISO 5815:1989, modified)	
EN 1899-2:1998	Water quality - Determination of biochemical oxygen demand after n days (BODn) - Part 2: Method for undiluted samples (ISO 5815:1989, modified)	
EN 25663:1993	Water quality - Determination of Kjeldahl nitrogen - Method after mineralization with selenium (ISO 5663:1984)	

Value	Definition	Short Description
EN 25813:1992	Water quality - Determination of dissolved oxygen - Iodometric method (ISO 5813:1983)	
EN 25814:1992	Water quality - Determination of dissolved oxygen - Electrotechnical probe method (ISO 5814:1990)	
EN 26595:1992	Water quality - Determination of total arsenic - Silver diethyldithiocarbamate spectrophotometric method (ISO 6595:1982)	
EN 26595:1992/AC: 1992	Water quality - Determination of total arsenic - Silver diethyldithiocarbamate spectrophotometric method (ISO 6595:1982)	
EN 26777:1993	Water quality - Determination of nitrite - Molecular nitrite absorption spectrometric method (ISO 6777:1984)	
EN 27888:1993	Water quality - Determination of electrical conductivity (ISO 7888:1985)	
EN 872:2005	Water quality - Determination of suspended solids - Method by filtration through glass fibre filters	
EN ISO 10301:1997	Water quality - Determination of highly volatile halogenated hydrocarbons - Gas-chromatographic methods (ISO 10301:1997)	
EN ISO 10304-1:1995	Water quality - Determination of dissolved fluoride, chloride, nitrite, orthophosphate, bromide, nitrate and sulfate ions, using liquid chromatography of ions - Part 1: Method for water with low contamination (ISO 10304-1:1992)	
EN ISO 10304-2:1996	Water quality - Determination of dissolved anions by liquid chromatography of ions - Part 2: Determination of bromide, chloride, nitrate, nitrite, orthophosphate and sulfate in waste water (ISO 10304-2:1995)	
EN ISO 10304-3:1997	Water quality - Determination of dissolved anions by liquid chromatography of ions - Part 3: Determination of chromate, iodide, sulfite, thiocyanate and thiosulfate (ISO 10304-3:1997)	
EN ISO 10304-4:1999	Water quality - Determination of dissolved anions by liquid chromatography of ions - Part 4: Determination of chlorate, chloride and chlorite in water with low contamination (ISO 10304-4:1997)	
EN ISO 10695:2000	Water quality - Determination of selected organic nitrogen and phosphorus compounds - Gas chromatographic methods (ISO 10695:2000)	
EN ISO 11732:2005	Water quality - Determination of ammonium nitrogen - Method by flow analysis (CFA and FIA) and spectrometric detection (ISO 11732:2005)	
EN ISO 11885:1997	Water quality - Determination of 33 elements by inductively coupled plasma atomic emission spectroscopy (ISO 11885:1996)	
EN ISO 11905-1:1998	Water quality - Determination of nitrogen - Part 1: Method using oxidative digestion with peroxodisulfate (ISO 11905-1:1997)	
EN ISO 11969:1996	Water quality - Determination of arsenic - Atomic absorption spectrometric method (hydride technique) (ISO 11969:1996)	

Value	Definition	Short Description
EN ISO 12020:2000	Water quality - Determination of aluminium - Atomic absorption spectrometric methods (ISO 12020:1997)	
EN ISO 13395:1996	Water quality - Determination of nitrite nitrogen and nitrate nitrogen and the sum of both by flow analysis (CFA and FIA) and spectrometric detection (ISO 13395:1996)	
EN ISO 14402:1999	Water quality - Determination of phenol index by flow analysis (FIA and CFA)(ISO 14402:1999)	
EN ISO 14403:2002	Water quality - Determination of total cyanide and free cyanide by continuous flow analysis (ISO 14403:2002)	
EN ISO 14911:1999	Water quality - Determination of dissolved Li+, Na+, NH4+, K+, Mn2+, Ca2+, Mg2+, Sr2+ and Ba2+ using ion chromatography - Method for water and waste water (ISO 14911:1998)	
EN ISO 15061:2001	Water quality - Determination of dissolved bromate - Method by liquid chromatography of ions (ISO 15061:2001)	
EN ISO 15586:2003	Water quality - Determination of trace elements using atomic absorption spectrometry with graphite furnace (ISO 15586:2003)	
EN ISO 15680:2003	Water quality - Gas-chromatographic determination of a number of monocyclic aromatic hydrocarbons, naphthalene and several chlorinated compounds using purge-and-trap and thermal desorption (ISO 15680:2003)	
EN ISO 15681-1:2004	Water quality - Determination of orthophosphate and total phosphorus contents by flow analysis (FIA and CFA) - Part 1: Method by flow injection analysis (FIA) (ISO 15681-1:2003)	
EN ISO 15681-2:2004	Water quality - Determination of orthophosphate and total phosphorus contents by flow analysis (FIA and CFA) - Part 2: Method by continuous flow analysis (CFA) (ISO 15681-2:2003)	
EN ISO 15682:2001	Water quality - Determination of chloride by flow analysis (CFA and FIA) and photometric or potentiometric detection (ISO 15682:2000)	
EN ISO 15913:2003	Water quality - Determination of selected phenoxyalkanoic herbicides, including bentazones and hydroxybenzonitriles by gas chromatography and mass spectrometry after solid phase extraction and derivatization (ISO 15913:2000)	
EN ISO 17294-1:2006	Water quality - Application of inductively coupled plasma mass spectrometry (ICP-MS) - Part 1: General guidelines (ISO 17294-1:2004)	
EN ISO 17294-2:2004	Water quality - Application of inductively coupled plasma mass spectrometry (ICP-MS) - Part 2: Determination of 62 elements (ISO 17294-2:2003)	
EN ISO 17353:2005	Water quality - Determination of selected organotin compounds - Gas chromatographic method (ISO 17353:2004)	
EN ISO 17495:2003	Water quality - Determination of selected nitrophenols - Method by solid-phase extraction and gas chromatography with mass spectrometric detection (ISO 17495:2001)	

Value	Definition	Short Description
EN ISO 17993:2003	Water quality - Determination of 15 polycyclic aromatic hydrocarbons (PAH) in water by HPLC with fluorescence detection after liquid-liquid extraction (ISO 17993:2002)	
EN ISO 18412:2006	Water quality - Determination of chromium(VI) - Photometric method for weakly contaminated water (ISO 18412:2005)	
EN ISO 18856:2005	Water quality - Determination of selected phthalates using gas chromatography/mass spectrometry (ISO 18856:2004)	
EN ISO 18857-1:2006	Water quality - Determination of selected alkylphenols - Part 1: Method for non-filtered samples using liquid-liquid extraction and gas chromatography with mass selective detection (ISO 18857-1:2005)	
EN ISO 23631:2006	Water quality - Determination of dalapon, trichloroacetic acid and selected haloacetic acids - Method using gas chromatography (GC-ECD and/or GC-MS detection) after liquid-liquid extraction and derivatization (ISO 23631:2006)	
EN ISO 23631:2006/AC:2007	Water quality - Determination of dalapon, trichloroacetic acid and selected haloacetic acids - Method using gas chromatography (GC-ECD and/or GC-MS detection) after liquid-liquid extraction and derivatization (ISO 23631:2006)	
EN ISO 5667-1:2006	Water quality - Sampling - Part 1: Guidance on the design of sampling programmes and sampling techniques (ISO 5667-1:2006)	
EN ISO 5667-1:2006/AC:2007	Water quality - Sampling - Part 1: Guidance on the design of sampling programmes and sampling techniques (ISO 5667-1:2006)	
EN ISO 5667-3:2003	Water quality - Sampling - Part 3: Guidance on the preservation and handling of water samples (ISO 5667-3:2003)	
EN ISO 5961:1995	Water quality - Determination of cadmium by atomic absorption spectrometry (ISO 5961:1994)	
EN ISO 6468:1996	Water quality - Determination of certain organochlorine insecticides, polychlorinated biphenyls and chlorobenzenes - Gas chromatographic method after liquid-liquid extraction (ISO 6468:1996)	
EN ISO 6878:2004	Water quality - Determination of phosphorus - Ammonium molybdate spectrometric method (ISO 6878:2004)	
EN ISO 7027:1999	Water quality - Determination of turbidity (ISO 7027:1999)	
EN ISO 7887:1994	Water quality - Examination and determination of colour (ISO 7887:1994)	
EN ISO 7980:2000	Water quality - Determination of calcium and magnesium - Atomic absorption spectrometric method (ISO 7980:1986)	
EN ISO 9377-2:2000	Water quality - Determination of hydrocarbon oil index - Part 2: Method using solvent extraction and gas chromatography (ISO 9377-2:2000)	
EN ISO 9562:2004	Water quality - Determination of adsorbable organically bound halogens (AOX) (ISO 9562:2004)	
EN ISO 9963-1:1995	Water quality - Determination of alkalinity - Part 1: Determination of total and composite alkalinity (ISO 9963-1:1994)	

Value	Definition	Short Description
EN ISO 9963-2:1995	Water quality - Determination of alkalinity - Part 2: Determination of carbonate alkalinity (ISO 9963-2:1994)	

4.5 Codelists for **Hazardous Substances and Other Chemical Determinands in Lakes - Disaggregated Data** table

4.5.1 Country Code codelist

Value	Definition	Short Description
AL	Albania	
AT	Austria	
BA	Bosnia and Herzegovina	
BE	Belgium	
BG	Bulgaria	
CH	Switzerland	
CY	Cyprus	
CZ	Czech Republic	
DE	Germany	
DK	Denmark	
EE	Estonia	
ES	Spain	
FI	Finland	
FR	France	
GB	United Kingdom	
GR	Greece	
HR	Croatia	
HU	Hungary	
IE	Ireland	
IS	Iceland	
IT	Italy	
LI	Liechtenstein	
LT	Lithuania	
LU	Luxembourg	
LV	Latvia	
ME	Montenegro	
MK	Macedonia, the Former Yugoslav Republic of	
MT	Malta	
NL	Netherlands	
NO	Norway	
PL	Poland	
PT	Portugal	
RO	Romania	
RS	Serbia	
SE	Sweden	
SI	Slovenia	
SK	Slovakia	
TR	Turkey	

Value	Definition	Short Description
XK	Kosovo	

4.5.2 Unit of Measurement of Hazardous Substances codelist

Value	Definition	Short Description
Bq	Becquerels (radionuclides)	
mg/g	miligrammes per gram	
mg/kg	miligrammes per kilogram	
mg/l	miligrammes per liter	
ng/g	nanogrammes per gram	
ng/kg	nanogrammes per kilogram	
ng/l	nanogrammes per liter	
µg/g	microgrammes per gram	
µg/kg	microgrammes per kilogram	
µg/l	microgrammes per liter	

4.5.3 Chemical Abstract Service Number codelist

Value	Definition	Short Description
100-02-7	Nitrophenol	Preferred SoE Haz.Subst. [µg/l]
100-41-4	Ethylbenzene	[µg/l]
100-42-5	Styrene	[µg/l]
1002-53-5	Dibutyltin	[µg/l]
10028-17-8	Tritium	[µg/l]
10061-01-5	c-1,3-dichloropropene	[µg/l]
10061-02-6	t-1,3-dichloropropene	[µg/l]
1007-28-9	Desisopropylatrazine	[µg/l]
101-55-3	4-bromophenyl phenyl ether	[µg/l]
1014-69-3	Desmetryn	[µg/l]
1024-57-3	Heptachloroepoxide	Preferred SoE Haz.Subst. [µg/l]
10265-92-6	Methamidophos	[µg/l]
103-65-1	n-propylbenzene	[µg/l]
104-35-8	4-nonylphenol mono-ethoxylate (NP1EO)	[µg/l]
104-40-5	4-nonylphenol	Preferred SoE Haz.Subst. [µg/l]
104-51-8	n-butylbenzene	[µg/l]
105-67-9	2,4-dimethyl-phenol	[µg/l]
106-42-3	P-xylene	[µg/l]
106-43-4	4-chlorotoluene	[µg/l]
106-44-4	4-methyl-phenol	[µg/l]
106-44-5	P-cresol	[µg/l]
106-46-7	1,4-dichlorobenzene	[µg/l]
106-93-4	1,2-dibromoethane	[µg/l]
1066-51-9	Aminomethylphosphonic acid (AMPA)	[µg/l]
107-06-2	1,2-dichloroethane	Preferred SoE Haz.Subst. [µg/l]
107-13-1	Acrylonitrile	[µg/l]
107-46-0	Hexamethyldisiloxane (HMDS)	[µg/l]
1070-78-6	1,1,1,3-tetrachloropropane	[µg/l]

Value	Definition	Short Description
1071-83-6	Glyphosate	[µg/l]
108-38-3	M-xylene	[µg/l]
108-67-8	1,3,5-trimethylbenzene	[µg/l]
108-70-3	1,3,5-trichlorobenzene	[µg/l]
108-86-1	Bromobenzene	[µg/l]
108-88-3	Toluene	Preferred SoE Haz.Subst. [µg/l]
108-90-7	Chlorobenzene	[µg/l]
108-95-2	Phenol	[µg/l]
1113-02-6	Omethoate	[µg/l]
112410-23-8	Tebufenozide	[µg/l]
115-29-7	Endosulfan	[µg/l]
115-32-2	Dicofol	Preferred SoE Haz.Subst. [µg/l]
1163-19-5	Bis(pentabromophenyl) ether	[µg/l]
117-81-7	Di (2-ethylhexyl) phthalate (DEHP)	Preferred SoE Haz.Subst. [µg/l]
118-74-1	Hexachlorobenzene (HCB)	Preferred SoE Haz.Subst. [µg/l]
118-96-7	2,4,6-trinitrotoluene	[µg/l]
1194-65-6	Dichlobenil	[µg/l]
120-12-7	Anthracene	Preferred SoE Haz.Subst. [µg/l]
120-36-5	Dichlorprop (2,4-DP)	[µg/l]
120-82-1	1,2,4-trichlorobenzene	[µg/l]
120-83-2	2,4-dichlorophenol	[µg/l]
12002-48-1	Trichlorobenzenes	Preferred SoE Haz.Subst. [µg/l]
120928-09-8	Fenazaquin	[µg/l]
121-14-2	2,4-dinitrotoluene	[µg/l]
121-75-5	Malathion	[µg/l]
122-14-5	Fenitrothion	[µg/l]
122-34-9	Simazine	Preferred SoE Haz.Subst. [µg/l]
123-33-1	Maleinhydrazid	[µg/l]
124-48-1	Dibromochloromethane	[µg/l]
124495-18-7	Quinoxyfen	Preferred SoE Haz.Subst. [µg/l]
127-18-4	1,1,2,2-tetrachloroethene	Preferred SoE Haz.Subst. [µg/l]
12767-79-2	Aroclor	[µg/l]
129-00-0	Pyrene	[µg/l]
13071-79-9	Terbufos	[µg/l]
131-11-3	Dimethyl phthalate	[µg/l]
131-16-8	Dipropyl phthalate	[µg/l]
131-18-0	Dipentyl phthalate	[µg/l]
1321-64-8	Pentachloronaphthalene	[µg/l]
1321-65-9	Trichloronaphthalene	[µg/l]
133-06-2	Captan	[µg/l]
133-53-9	3,5-dimethyl-phenol	[µg/l]
1330-20-7	Xylene	[µg/l]
1335-87-1	Hexachloronaphthalene	[µg/l]
1335-88-2	Tetrachloronaphthalene	[µg/l]
13351-73-0	Tolyltriazole	Preferred SoE Haz.Subst. [µg/l]
13356-08-6	Fenbutatin oxide	[µg/l]
1336-36-3	Polychlorinated biphenyls	[µg/l]
133855-98-8	Epoxiconazole	[µg/l]

Value	Definition	Short Description
135-19-3	2-naphthol	[µg/l]
135-98-8	sec-butylbenzene	[µg/l]
136-85-6	Methylbenzotriazol	Preferred SoE Haz.Subst. [µg/l]
136426-54-5	Fluquinconazole	[µg/l]
136677-10-6	Polychlorinated dibenzofurans (PCDF)	[µg/l]
13684-56-5	Desmedipham	[µg/l]
137-26-8	Thiram	[µg/l]
137-30-4	Ziram	[µg/l]
139-13-9	NTA	[µg/l]
139-40-2	Propazine	[µg/l]
140-57-8	Aramite	[µg/l]
140-66-9	Para-tert-octylphenol	Preferred SoE Haz.Subst. [µg/l]
142-28-9	1,3-dichloropropane	[µg/l]
143-50-0	Chlordecone	[µg/l]
144-49-0	Fluoroacetic acid	[µg/l]
151-21-3	Sodium dodecyl sulfate	[µg/l]
15165-67-0	Dichlorprop-P	[µg/l]
15307-86-5	Diclofenac	Preferred SoE Haz.Subst. [µg/l]
156-52-9	c-1,2-dichloroethene	[µg/l]
156-59-2	Cis-1,2-dichloroethene	[µg/l]
156-60-5	Trans 1,2-dichloroethene	[µg/l]
1563-66-2	Carbofuran	[µg/l]
15687-27-1	Ibuprofen	Preferred SoE Haz.Subst. [µg/l]
1570-64-5	4-chloro-2-methylphenol	[µg/l]
1570-65-6	4,6-dichloro-2-methylphenol	[µg/l]
1582-09-8	Trifluralin	Preferred SoE Haz.Subst. [µg/l]
15972-60-8	Alachlor	Preferred SoE Haz.Subst. [µg/l]
1610-18-0	Prometon	[µg/l]
1634-04-4	MTBE	[µg/l]
16478-18-5	Pentachloroiodobenzene	[µg/l]
16484-77-8	Mecoprop-P (MCPP-P)	[µg/l]
16655-82-6	3-hydroxycarbofuran	[µg/l]
16672-87-0	2-chloroethylphosphonic acid	[µg/l]
16752-77-5	Methomyl	[µg/l]
1689-83-4	Ioxynil	[µg/l]
1689-84-5	Bromoxynil	[µg/l]
1689-99-2	Bromoxynil octanoate	[µg/l]
1698-60-8	Chloridazon	[µg/l]
1702-17-6	Clopyralid	[µg/l]
17040-19-6	Demeton-S-methylsulfon	[µg/l]
1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	[µg/l]
1763-23-1	PFOS and its derivatives	Preferred SoE Haz.Subst. [µg/l]
1806-26-4	4-octylphenol	[µg/l]
18181-70-9	Iodofenphos	[µg/l]
182346-21-0	2,2',3,4,4'-pentabromodiphenyl ether (BDE85)	[µg/l]
1825-21-4	Pentachloroanisole	[µg/l]
182677-30-1	2,2',3,4,4',5'-hexabromodiphenyl ether (BD(E)138)	[µg/l]
1836-75-5	Nitrophen	[µg/l]

Value	Definition	Short Description
1861-40-1	Benfluralin	[µg/l]
189084-64-8	PBDE100 (2,2',4,4',6-pentabromodiphenyl ether)	[µg/l]
191-24-2	Benzo(g,h,i)perylene	Preferred SoE Haz.Subst. [µg/l]
1912-24-9	Atrazine	Preferred SoE Haz.Subst. [µg/l]
1918-00-9	Dicamba	[µg/l]
1918-13-4	Chlorthiamid	[µg/l]
193-39-5	Indeno(1,2,3-cd)pyrene	Preferred SoE Haz.Subst. [µg/l]
2008-58-4	2,6-dichlorobenzamide	[µg/l]
20427-84-3	4-nonylphenol di-ethoxylate (NP2EO)	[µg/l]
20461-54-5	Iodide	[µg/l]
205-99-2	Benzo(b)fluoranthene	Preferred SoE Haz.Subst. [µg/l]
2051-24-3	5,5',6,6'-decachlorobiphenyl (CB209)	[µg/l]
206-44-0	Fluoranthene	Preferred SoE Haz.Subst. [µg/l]
207-08-9	Benzo(k)fluoranthene	Preferred SoE Haz.Subst. [µg/l]
207122-15-4	PBDE154 (2,2',4,4',5,6'-hexabromodiphenyl ether)	[µg/l]
208-96-8	Acenaphthylene	[µg/l]
2104-64-5	O-Ethyl O-(p-nitrophenyl) phenylphosphonothiolate	[µg/l]
21087-64-9	Metribuzin	[µg/l]
2163-68-0	Hydroxyatrazine	[µg/l]
2164-08-1	Lenacil	[µg/l]
21725-46-2	Cyanazine	[µg/l]
218-01-9	Chrysene	[µg/l]
22204-53-1	Naproxen	Preferred SoE Haz.Subst. [µg/l]
2227-13-6	Tetrasul	[µg/l]
2234-13-1	Octachloronaphthalene	[µg/l]
2310-17-0	Phosalone	[µg/l]
23103-98-2	Pirimicarb	[µg/l]
23593-75-1	Clotrimazole	[µg/l]
2385-85-5	Mirex	[µg/l]
23950-58-5	Propyzamide	[µg/l]
2440-02-0	Heptachloronorbornene	[µg/l]
24959-67-9	Bromide	[µg/l]
25057-89-0	Bentazone	[µg/l]
25140-90-3	2-(2,6-dichlorophenoxy)propionic acid (2,6-DCPP)	[µg/l]
25154-52-3	Nonylphenol	[µg/l]
25167-83-3	Tetrachlorophenols	[µg/l]
2599-11-3	Hydroxysimazine	[µg/l]
262-12-4	Dibenzodioxin	[µg/l]
26225-79-6	Ethofumesate	[µg/l]
26259-45-0	Secbumeton	[µg/l]
28159-98-0	Cybutryne	Preferred SoE Haz.Subst. [µg/l]
29122-68-7	Atenolol	Preferred SoE Haz.Subst. [µg/l]
2921-88-2	Chlorpyrifos	Preferred SoE Haz.Subst. [µg/l]
294-62-2	Cyclododecane	[µg/l]
297-78-9	Isobenzan	[µg/l]
298-00-0	Parathion-methyl	[µg/l]

Value	Definition	Short Description
298-46-4	Carbamazepin	Preferred SoE Haz.Subst. [µg/l]
30125-63-4	Desethylterbuthylazine	[µg/l]
309-00-2	Aldrin	Preferred SoE Haz.Subst. [µg/l]
3115-49-9	Nonylphenoxyacetic acid (NPE1C)	Preferred SoE Haz.Subst. [µg/l]
314-40-9	Bromacil	[µg/l]
31508-00-6	PCB118	[µg/l]
319-84-6	Alpha-HCH	[µg/l]
319-85-7	Beta-HCH	[µg/l]
319-86-8	Delta-HCH	[µg/l]
3194-55-6	Hexabromocyclododecane (HBCDD)	Preferred SoE Haz.Subst. [µg/l]
32241-08-0	Heptachloronaphthalene	[µg/l]
32534-81-9	Diphenyl ether, pentabromo derivative	[µg/l]
32536-52-0	Diphenyl ether, octabromo deviate	[µg/l]
32598-13-3	PCB77	[µg/l]
32598-14-4	PCB105 (2,3,3',4,4'-pentachlorobiphenyl)	[µg/l]
32774-16-6	PCB169	[µg/l]
330-54-1	Diuron	Preferred SoE Haz.Subst. [µg/l]
330-55-2	Linuron	Preferred SoE Haz.Subst. [µg/l]
3307-39-9	2-(4-chlorophenoxy)propionic acid (4-CPP)	[µg/l]
33213-65-9	Beta-Endosulfan	[µg/l]
333-41-5	Diazinon	Preferred SoE Haz.Subst. [µg/l]
335-67-1	PFOA	Preferred SoE Haz.Subst. [µg/l]
33693-04-8	Terbumeton	[µg/l]
3397-62-4	Deisopropyldeethylatrazine	[µg/l]
34123-59-6	Isoproturon	Preferred SoE Haz.Subst. [µg/l]
3424-82-6	DDE, o,p'	[µg/l]
34256-82-1	Acetochlor	[µg/l]
35065-27-1	PCB153 (2,2',4,4',5,5'-hexachlorobiphenyl)	[µg/l]
35065-28-2	PCB138 (2,2',3,4,4',5-hexachlorobiphenyl)	[µg/l]
35065-29-3	PCB180 (2,2',3,4,4',5,5'-heptachlorobiphenyl)	[µg/l]
35065-30-6	PCB170 (1,2,3,4-tetrachloro-5-(2,3,4-trichlorophenyl)benzene)	[µg/l]
35693-99-3	PCB52 (2,2',5,5'-tetrachlorobiphenyl)	[µg/l]
35694-08-7	PCB194 (1,2,3,4-tetrachloro-5-(2,3,4,5-tetrachlorophenyl)benzene)	[µg/l]
36065-30-2	2,4,6-tribromophenyl 2-methyl-2,3-dibromopropyl ether	[µg/l]
36355-01-8	Hexabromobiphenyl	[µg/l]
36643-28-4	Tributyltin cation	Preferred SoE Haz.Subst. [µg/l]
37350-58-6	Metoprolol	Preferred SoE Haz.Subst. [µg/l]
37680-73-2	PCB101 (2,2',4,5,5'-pentachlorobiphenyl)	[µg/l]
38380-08-4	PCB156 (2,3,3',4,4',5-hexachlorobiphenyl)	[µg/l]
39635-31-9	PCB189 (1,2,3,4-tetrachloro-5-(3,4,5-trichlorophenyl)benzene)	[µg/l]
39765-80-5	Nonachlor-trans	[µg/l]
40487-42-1	Pendimethalin	[µg/l]
41318-75-6	PBDE28	[µg/l]
41394-05-2	Metamitron	[µg/l]
41859-67-0	Bezafibrate	Preferred SoE Haz.Subst. [µg/l]
4234-79-1	Kelevan	[µg/l]

Value	Definition	Short Description
42576-02-3	Bifenox	Preferred SoE Haz.Subst. [µg/l]
4636-83-3	Morfamquat	[µg/l]
465-73-6	Isodrin	Preferred SoE Haz.Subst. [µg/l]
470-90-6	Chlorfenvinphos	Preferred SoE Haz.Subst. [µg/l]
4901-51-3	2,3,4,5-tetrachlorophenol	[µg/l]
4904-61-4	1,5,9-cyclododecatriene	[µg/l]
50-00-0	Formaldehyde	[µg/l]
50-28-2	17beta-estradiol	Preferred SoE Haz.Subst. [µg/l]
50-29-3	DDT, p,p'	Preferred SoE Haz.Subst. [µg/l]
50-30-6	2,6-dichlorobenzoic acid	[µg/l]
50-32-8	Benzo(a)pyrene	Preferred SoE Haz.Subst. [µg/l]
51000-52-3	Vinyl neodecanoate	[µg/l]
512-04-9	Diosgenin	[µg/l]
51218-45-2	Metolachlor	[µg/l]
51235-04-2	Hexazinone	[µg/l]
52236-30-3	Desamino-diketo-metribuzin	[µg/l]
52315-07-8	Cypermethrin	Preferred SoE Haz.Subst. [µg/l]
526-75-0	2,3-dimethyl-phenol	[µg/l]
52645-53-1	Permethrin	[µg/l]
52663-72-6	PCB167 (1,2,3-trichloro-5-(2,4,5-trichlorophenyl)benzene)	[µg/l]
53-19-0	DDD, o,p'	[µg/l]
53-70-3	Dibenzo(a,h)anthracene	[µg/l]
534-52-1	Dinitro-o-cresol (DNOC)	[µg/l]
540-59-0	1,2-dichloroethene	[µg/l]
541-73-1	1,3-dichlorobenzene	[µg/l]
5436-43-1	PBDE47 (2,2',4,4'-tetrabromodiphenyl ether)	[µg/l]
55512-33-9	Pyridate	[µg/l]
55525-54-7	3,3'-(ureylenedimethylene)bis(3,5,5'-trimethylcyclohexyl) diisocyanate	[µg/l]
5598-13-0	Chlorpyrifos-methyl	[µg/l]
56-23-5	Tetrachloromethane	Preferred SoE Haz.Subst. [µg/l]
56-38-2	Parathion	[µg/l]
56-55-3	Benzo(a)anthracene	[µg/l]
563-58-6	1,1-dichloropropene	[µg/l]
56507-37-0	Diketo-metribuzin	[µg/l]
56573-85-4	Tributyltin	[µg/l]
57-12-5	Cyanides (as total CN)	[µg/l]
57-63-6	17alpha-ethinylestradiol	Preferred SoE Haz.Subst. [µg/l]
57-74-9	Chlordane	[µg/l]
57465-28-8	PCB126 (1,2,3-trichloro-5-(3,4-dichlorophenyl)benzene)	[µg/l]
576-26-1	2,6-dimethyl-phenol	[µg/l]
57837-19-1	Metalaxyl	[µg/l]
58-08-2	Caffeine	Preferred SoE Haz.Subst. [µg/l]
58-89-9	Gamma-HCH (Lindane)	Preferred SoE Haz.Subst. [µg/l]
58-90-2	2,3,4,6-tetrachlorophenol	[µg/l]
59-50-7	3-methyl-4-chlorophenol	[µg/l]
5915-41-3	Terbuthylazine	[µg/l]

Value	Definition	Short Description
594-20-7	2,2-dichloropropane	[µg/l]
60-00-4	EDTA	[µg/l]
60-51-5	Dimethoate	[µg/l]
60-57-1	Dieldrin	Preferred SoE Haz.Subst. [µg/l]
60145-21-3	PCB103	[µg/l]
60207-90-1	Propiconazole	[µg/l]
603-35-0	Triphenylphosphine	[µg/l]
60328-60-9	PBDE99	[µg/l]
60348-60-9	2,2',4,4',5-pentabromodiphenyl ether (BDE99)	[µg/l]
608-73-1	Hexachlorocyclohexane (HCH)	[µg/l]
608-93-5	Pentachlorobenzene	Preferred SoE Haz.Subst. [µg/l]
6108-10-07	Epsilon-HCH	[µg/l]
6164-98-3	Chlordimeform	[µg/l]
6190-65-4	Desethylatrazine	[µg/l]
62-73-7	Dichlorvos	Preferred SoE Haz.Subst. [µg/l]
630-20-6	1,1,1,2-tetrachloroethane	[µg/l]
64902-72-3	Chlorsulfuron	[µg/l]
65510-44-3	PCB123 (1,2,3-trichloro-5-(2,4-dichlorophenyl)benzene)	[µg/l]
66753-07-9	Hydroxyterbuthylazine	[µg/l]
67-66-3	Trichloromethane	Preferred SoE Haz.Subst. [µg/l]
67129-08-2	Metazachlor	[µg/l]
67564-91-4	Fenpropimorph	[µg/l]
68631-49-2	PBDE153 (2,2',4,4',5,5'-hexabromodiphenyl ether)	[µg/l]
688-73-3	Tributyltin compounds	Preferred SoE Haz.Subst. [µg/l]
69782-90-7	PCB157 (1,2,3-trichloro-5-(2,3,4-trichlorophenyl)benzene)	[µg/l]
7012-37-5	PCB28 (2,4,4'-trichlorobiphenyl)	[µg/l]
70124-77-5	Flucythrinate	[µg/l]
70362-41-3	PCB106	[µg/l]
70362-50-4	PCB81 (3,4,4',5-tetrachlorobiphenyl)	[µg/l]
70630-17-0	Metalaxyl-M	[µg/l]
70776-03-3	Naphthalene, chloro derivatives	[µg/l]
7085-19-0	Mecoprop	Preferred SoE Haz.Subst. [µg/l]
71-43-2	Benzene	Preferred SoE Haz.Subst. [µg/l]
71-55-6	1,1,1-trichloroethane	[µg/l]
72-20-8	Endrin	Preferred SoE Haz.Subst. [µg/l]
72-43-5	Methoxychlor	[µg/l]
72-54-8	DDD, p,p'	Preferred SoE Haz.Subst. [µg/l]
72-55-9	DDE, p,p'	Preferred SoE Haz.Subst. [µg/l]
723-46-6	Sulfamethoxazol	Preferred SoE Haz.Subst. [µg/l]
7286-69-3	Sebuthylazine	[µg/l]
7287-19-6	Prometryn	[µg/l]
732-26-3	2,4,6-tri-tert-butylphenol	[µg/l]
738-70-5	Trimethoprim	Preferred SoE Haz.Subst. [µg/l]
74-83-9	Bromomethane	[µg/l]
74-95-3	Dibromomethane	[µg/l]
74-97-5	Bromochloromethane	[µg/l]

Value	Definition	Short Description
74070-46-5	Aclonifen	Preferred SoE Haz.Subst. [µg/l]
74233-64-6	Metsulfuronmethyl	[µg/l]
7429-90-5	Aluminium and its compounds	[µg/l]
7429-90-5_dissolved	Aluminium dissolved	[µg/l]
7439-89-6	Iron and its compounds	[µg/l]
7439-89-6_dissolved	Iron dissolved	[µg/l]
7439-92-1	Lead	Preferred SoE Haz.Subst. [µg/l]
7439-92-1_dissolved	Lead dissolved	Preferred SoE Haz.Subst. [µg/l]
7439-93-2	Lithium	[µg/l]
7439-95-4	Magnesium	[mg/l]
7439-96-5	Manganese and its compounds	[µg/l]
7439-96-5_dissolved	Manganese dissolved	[µg/l]
7439-97-6	Mercury	Preferred SoE Haz.Subst. [µg/l]
7439-97-6_dissolved	Mercury dissolved	Preferred SoE Haz.Subst. [µg/l]
7439-98-7	Molybdenum and its compounds	[µg/l]
7440-02-0	Nickel	Preferred SoE Haz.Subst. [µg/l]
7440-02-0_dissolved	Nickel dissolved	Preferred SoE Haz.Subst. [µg/l]
7440-09-7	Potassium	[mg/l]
7440-22-4	Silver	[µg/l]
7440-23-5	Sodium	[mg/l]
7440-24-6	Strontium	[µg/l]
7440-28-0	Thallium	[µg/l]
7440-31-5	Tin and its compounds	[µg/l]
7440-32-6	Titanium	[µg/l]
7440-33-7	Tungsten and its compounds	[µg/l]
7440-36-0	Antimony	[µg/l]
7440-38-2	Arsenic	Preferred SoE Haz.Subst. [µg/l]
7440-38-2_dissolved	Arsenic dissolved	Preferred SoE Haz.Subst. [µg/l]
7440-39-3	Barium	[µg/l]
7440-41-7	Beryllium	[µg/l]
7440-42-8	Boron	[µg/l]
7440-43-9	Cadmium	Preferred SoE Haz.Subst. [µg/l]
7440-43-9_dissolved	Cadmium dissolved	Preferred SoE Haz.Subst. [µg/l]
7440-47-3	Chromium	Preferred SoE Haz.Subst. [µg/l]
7440-47-3_dissolved	Chromium dissolved	Preferred SoE Haz.Subst. [µg/l]
7440-48-4	Cobalt and its compounds	[µg/l]
7440-50-8	Copper	Preferred SoE Haz.Subst. [µg/l]
7440-50-8_dissolved	Copper dissolved	Preferred SoE Haz.Subst. [µg/l]
7440-61-1	Uranium	[µg/l]
7440-62-2	Vanadium and its compounds	[µg/l]
7440-66-6	Zinc	Preferred SoE Haz.Subst. [µg/l]

Value	Definition	Short Description
7440-66-6_dissolved	Zinc dissolved	Preferred SoE Haz.Subst. [µg/l]
7440-70-2	Calcium	[mg/l]
74472-37-0	PCB114 (2,3,4,4',5-pentachlorobiphenyl)	[µg/l]
75-01-4	Chloroethene (vinylchloride)	[µg/l]
75-09-2	Dichloromethane	Preferred SoE Haz.Subst. [µg/l]
75-25-2	Bromoform	[µg/l]
75-27-4	Dichlorobromomethane	[µg/l]
75-34-3	1,1-dichloroethane	[µg/l]
75-35-4	1,1-dichloroethene	[µg/l]
75-69-4	Trichlorofluoromethane	[µg/l]
75-71-8	Dichlorodifluoromethane	[µg/l]
75-99-0	Dalapon	[µg/l]
76-03-9	Trichloroacetic acid	[µg/l]
76-44-8	Heptachlor	Preferred SoE Haz.Subst. [µg/l]
77-47-4	Hexachlorocyclopentadiene (HCCP)	[µg/l]
7782-41-4	Fluorine	[µg/l]
7782-49-2	Selenium and its compounds	[µg/l]
78-87-5	1,2-dichloropropane	[µg/l]
789-02-6	DDT, o,p'	Preferred SoE Haz.Subst. [µg/l]
79-00-5	1,1,2-trichloroethane	[µg/l]
79-01-6	1,1,2-trichloroethene	Preferred SoE Haz.Subst. [µg/l]
79-34-5	1,1,2,2-tetrachloroethane	[µg/l]
79-94-7	Tetrabromobisphenol A (TBBP-A)	[µg/l]
793-24-8	4-(dimethylbutylamino) diphenylamin (6PPD)	[µg/l]
80-05-7	Bisphenol A	[µg/l]
8001-35-2	Toxaphene	[µg/l]
81-15-2	Musk xylene	[µg/l]
81103-11-9	Clarithromycin	Preferred SoE Haz.Subst. [µg/l]
82-68-8	Quintozene	[µg/l]
83-32-9	Acenaphthene	[µg/l]
834-12-8	Ametryn	[µg/l]
83905-01-5	Azitromycin	Preferred SoE Haz.Subst. [µg/l]
84-66-2	Di-ethyl phthalate	[µg/l]
84-69-5	Di-iso-butyl phthalate	[µg/l]
84-74-2	Di-(n-butyl) phthalate	[µg/l]
84852-15-3	4-nonylphenol, branched	[µg/l]
85-01-8	Phenanthrene	[µg/l]
85-22-3	Pentabromoethylbenzene	[µg/l]
85-68-7	Butyl benzyl phthalate (BBP)	[µg/l]
85535-84-8	Chloroalkanes C10-13	Preferred SoE Haz.Subst. [µg/l]
85540-50-1	6-chloro-2-dimethylphenol	[µg/l]
86-73-7	Fluorene	[µg/l]
87-61-6	1,2,3-trichlorobenzene	[µg/l]
87-65-0	2,6-dichlorophenol	[µg/l]
87-68-3	Hexachlorobutadiene (HCBD)	Preferred SoE Haz.Subst. [µg/l]
87-86-5	Pentachlorophenol	Preferred SoE Haz.Subst. [µg/l]
88-06-2	2,4,6-trichlorophenol	[µg/l]
88-85-7	Dinoseb	[µg/l]

Value	Definition	Short Description
886-50-0	Terbutryn	Preferred SoE Haz.Subst. [µg/l]
90-12-0	1-methylnaphthalene	[µg/l]
9016-45-9	Nonylphenolethoxylate	[µg/l]
91-20-3	Naphthalene	Preferred SoE Haz.Subst. [µg/l]
91-57-6	2-methylnaphthalene	[µg/l]
919-86-8	Demeton-S-methyl	[µg/l]
93-72-1	Fenoprop	[µg/l]
93-76-5	2,4,5-T	[µg/l]
94-74-6	MCPA	Preferred SoE Haz.Subst. [µg/l]
94-75-7	2,4-D	[µg/l]
94-81-5	MCPB	[µg/l]
94-82-6	2,4-DB	[µg/l]
95-14-7	Benzotriazol	Preferred SoE Haz.Subst. [µg/l]
95-47-6	O-xylene	[µg/l]
95-48-7	2-methyl-phenol	[µg/l]
95-49-8	2-chlorotoluene	[µg/l]
95-50-1	1,2-dichlorobenzene	[µg/l]
95-63-6	1,2,4-trimethylbenzene	[µg/l]
95-65-8	3,4-dimethyl-phenol	[µg/l]
95-87-4	2,5-dimethylphenol	[µg/l]
95-95-4	2,4,5-trichlorophenol	[µg/l]
959-98-8	Alpha-Endosulfan	Preferred SoE Haz.Subst. [µg/l]
96-12-8	1,2-dibromo-3-chloropropane	[µg/l]
96-18-4	1,2,3-trichloropropane	[µg/l]
96-45-7	Ethylenethiourea (ETU)	[µg/l]
98-06-6	tert-butylbenzene	[µg/l]
98-51-1	4-tert-butyltoluene	[µg/l]
98-82-8	Isopropylbenzene	[µg/l]
99-87-6	4-isopropyltoluene	[µg/l]
no CAS 1	Adsorbable organic halogens (AOX)	[µg/l]
no CAS 10	Radionuclides	[µg/l]
no CAS 11	Chrysene+Triphenylene (sum)	[µg/l]
no CAS 12	DDT + DDE + DDD total = (DDT, o,p' + DDT, p,p' + DDE, o,p' + DDE, p,p' + DDD, o,p' + DDD, p,p')	[µg/l]
no CAS 13	Polyaromatic hydro-carbons (PAH) (sum)	[µg/l]
no CAS 14	PAH excl Bicycl (sum)	[µg/l]
no CAS 15	PCB (sum)	[µg/l]
no CAS 16	PCB7 (sum)	[µg/l]
no CAS 17	TCDD (dioxins and furans)	[µg/l]
no CAS 18	Total PCBs	[µg/l]
no CAS 19	Brominated diphenylethers	[µg/l]
no CAS 2	Brominated flame retardants	[µg/l]
no CAS 20	DDD (TDE) sum = (DDD, o,p' + DDD, p,p')	[µg/l]
no CAS 21	DDE sum = (DDE, o,p' + DDE, p,p')	[µg/l]
no CAS 22	DDT sum = (DDT, o,p' + DDT, p,p')	[µg/l]
no CAS 23	DDT total according Directive 2008/105/EC = (DDT, o,p' + DDT, p,p' + DDE, p,p' + DDD, p,p')	[µg/l]
no CAS 24	Dichlorobenzene	[µg/l]

Value	Definition	Short Description
no CAS 25	Dichlorophenol	[µg/l]
no CAS 26	Chloride	[mg/l]
no CAS 27	Chlorine Cl-	[mg/l]
no CAS 28	Chromium 3+	[µg/l]
no CAS 29	Chromium 6+	[µg/l]
no CAS 3	Detergents	[µg/l]
no CAS 30	Pesticides (sum)	[µg/l]
no CAS 32	Sulphate	[mg/l]
no CAS 33	Volatile organic halogens (VOX)	[µg/l]
no CAS 34	Phenols	[µg/l]
no CAS 36	meta + para xylene	[µg/l]
no CAS 4	Extractable organically bound chlorine	[µg/l]
no CAS 5	Extractable persistent organically bound chlorine	[µg/l]
no CAS 6	Hydrocarbons	[µg/l]
no CAS 8	PCB Total (congeners 28, 52, 101, 118, 138, 153, 180)	[µg/l]
no CAS 9	Polychlorinated dibenzodioxins (PCDD)	[µg/l]

4.5.4 CEN/ISO codelist

Value	Definition	Short Description
EN 12260:2003	Water quality - Determination of nitrogen - Determination of bound nitrogen (TNb), following oxidation to nitrogen oxides	
EN 12338:1998	Water quality - Determination of mercury - Enrichment methods by amalgamation	
EN 1233:1996	Water quality - Determination of chromium - Atomic absorption spectrometric methods	
EN 12673:1998	Water quality - Gas chromatographic determination of some selected chlorophenols in water	
EN 12918:1999	Water quality - Determination of parathion, parathion-methyl and some other organophosphorus compounds in water by dichloromethane extraction and gas chromatographic analysis	
EN 13506:2001	Water quality - Determination of mercury by atomic fluorescence spectrometry	
EN 14207:2003	Water quality - Determination of epichlorohydrin	
EN 1483:2007	Water quality - Determination of mercury - Method using atomic absorption spectrometry	
EN 1484:1997	Water analysis - Guidelines for the determination of total organic carbon (TOC) and dissolved organic carbon (DOC)	
EN 14996:2006	Water quality - Guidance on assuring the quality of biological and ecological assessments in the aquatic environment	
EN 1899-1:1998	Water quality - Determination of biochemical oxygen demand after n days (BODn) - Part 1: Dilution and seeding method with allylthiourea addition (ISO 5815:1989, modified)	

Value	Definition	Short Description
EN 1899-2:1998	Water quality - Determination of biochemical oxygen demand after n days (BODn) - Part 2: Method for undiluted samples (ISO 5815:1989, modified)	
EN 25663:1993	Water quality - Determination of Kjeldahl nitrogen - Method after mineralization with selenium (ISO 5663:1984)	
EN 25813:1992	Water quality - Determination of dissolved oxygen - Iodometric method (ISO 5813:1983)	
EN 25814:1992	Water quality - Determination of dissolved oxygen - Electrotechnical probe method (ISO 5814:1990)	
EN 26595:1992	Water quality - Determination of total arsenic - Silver diethyldithiocarbamate spectrophotometric method (ISO 6595:1982)	
EN 26595:1992/AC:1992	Water quality - Determination of total arsenic - Silver diethyldithiocarbamate spectrophotometric method (ISO 6595:1982)	
EN 26777:1993	Water quality - Determination of nitrite - Molecular nitrite absorption spectrometric method (ISO 6777:1984)	
EN 27888:1993	Water quality - Determination of electrical conductivity (ISO 7888:1985)	
EN 872:2005	Water quality - Determination of suspended solids - Method by filtration through glass fibre filters	
EN ISO 10301:1997	Water quality - Determination of highly volatile halogenated hydrocarbons - Gas-chromatographic methods (ISO 10301:1997)	
EN ISO 10304-1:1995	Water quality - Determination of dissolved fluoride, chloride, nitrite, orthophosphate, bromide, nitrate and sulfate ions, using liquid chromatography of ions - Part 1: Method for water with low contamination (ISO 10304-1:1992)	
EN ISO 10304-2:1996	Water quality - Determination of dissolved anions by liquid chromatography of ions - Part 2: Determination of bromide, chloride, nitrate, nitrite, orthophosphate and sulfate in waste water (ISO 10304-2:1995)	
EN ISO 10304-3:1997	Water quality - Determination of dissolved anions by liquid chromatography of ions - Part 3: Determination of chromate, iodide, sulfite, thiocyanate and thiosulfate (ISO 10304-3:1997)	
EN ISO 10304-4:1999	Water quality - Determination of dissolved anions by liquid chromatography of ions - Part 4: Determination of chlorate, chloride and chlorite in water with low contamination (ISO 10304-4:1997)	
EN ISO 10695:2000	Water quality - Determination of selected organic nitrogen and phosphorus compounds - Gas chromatographic methods (ISO 10695:2000)	
EN ISO 11732:2005	Water quality - Determination of ammonium nitrogen - Method by flow analysis (CFA and FIA) and spectrometric detection (ISO 11732:2005)	
EN ISO 11885:1997	Water quality - Determination of 33 elements by inductively coupled plasma atomic emission spectroscopy (ISO 11885:1996)	

Value	Definition	Short Description
EN ISO 11905-1:1998	Water quality - Determination of nitrogen - Part 1: Method using oxidative digestion with peroxodisulfate (ISO 11905-1:1997)	
EN ISO 11969:1996	Water quality - Determination of arsenic - Atomic absorption spectrometric method (hydride technique) (ISO 11969:1996)	
EN ISO 12020:2000	Water quality - Determination of aluminium - Atomic absorption spectrometric methods (ISO 12020:1997)	
EN ISO 13395:1996	Water quality - Determination of nitrite nitrogen and nitrate nitrogen and the sum of both by flow analysis (CFA and FIA) and spectrometric detection (ISO 13395:1996)	
EN ISO 14402:1999	Water quality - Determination of phenol index by flow analysis (FIA and CFA)(ISO 14402:1999)	
EN ISO 14403:2002	Water quality - Determination of total cyanide and free cyanide by continuous flow analysis (ISO 14403:2002)	
EN ISO 14911:1999	Water quality - Determination of dissolved Li+, Na+, NH4+, K+, Mn2+, Ca2+, Mg2+, Sr2+ and Ba2+ using ion chromatography - Method for water and waste water (ISO 14911:1998)	
EN ISO 15061:2001	Water quality - Determination of dissolved bromate - Method by liquid chromatography of ions (ISO 15061:2001)	
EN ISO 15586:2003	Water quality - Determination of trace elements using atomic absorption spectrometry with graphite furnace (ISO 15586:2003)	
EN ISO 15680:2003	Water quality - Gas-chromatographic determination of a number of monocyclic aromatic hydrocarbons, naphthalene and several chlorinated compounds using purge-and-trap and thermal desorption (ISO 15680:2003)	
EN ISO 15681-1:2004	Water quality - Determination of orthophosphate and total phosphorus contents by flow analysis (FIA and CFA) - Part 1: Method by flow injection analysis (FIA) (ISO 15681-1:2003)	
EN ISO 15681-2:2004	Water quality - Determination of orthophosphate and total phosphorus contents by flow analysis (FIA and CFA) - Part 2: Method by continuous flow analysis (CFA) (ISO 15681-2:2003)	
EN ISO 15682:2001	Water quality - Determination of chloride by flow analysis (CFA and FIA) and photometric or potentiometric detection (ISO 15682:2000)	
EN ISO 15913:2003	Water quality - Determination of selected phenoxyalkanoic herbicides, including bentazones and hydroxybenzonitriles by gas chromatography and mass spectrometry after solid phase extraction and derivatization (ISO 15913:2000)	
EN ISO 17294-1:2006	Water quality - Application of inductively coupled plasma mass spectrometry (ICP-MS) - Part 1: General guidelines (ISO 17294-1:2004)	
EN ISO 17294-2:2004	Water quality - Application of inductively coupled plasma mass spectrometry (ICP-MS) - Part 2: Determination of 62 elements (ISO 17294-2:2003)	

Value	Definition	Short Description
EN ISO 17353:2005	Water quality - Determination of selected organotin compounds - Gas chromatographic method (ISO 17353:2004)	
EN ISO 17495:2003	Water quality - Determination of selected nitrophenols - Method by solid-phase extraction and gas chromatography with mass spectrometric detection (ISO 17495:2001)	
EN ISO 17993:2003	Water quality - Determination of 15 polycyclic aromatic hydrocarbons (PAH) in water by HPLC with fluorescence detection after liquid-liquid extraction (ISO 17993:2002)	
EN ISO 18412:2006	Water quality - Determination of chromium(VI) - Photometric method for weakly contaminated water (ISO 18412:2005)	
EN ISO 18856:2005	Water quality - Determination of selected phthalates using gas chromatography/mass spectrometry (ISO 18856:2004)	
EN ISO 18857-1:2006	Water quality - Determination of selected alkylphenols - Part 1: Method for non-filtered samples using liquid-liquid extraction and gas chromatography with mass selective detection (ISO 18857-1:2005)	
EN ISO 23631:2006	Water quality - Determination of dalapon, trichloroacetic acid and selected haloacetic acids - Method using gas chromatography (GC-ECD and/or GC-MS detection) after liquid-liquid extraction and derivatization (ISO 23631:2006)	
EN ISO 23631:2006/AC: 2007	Water quality - Determination of dalapon, trichloroacetic acid and selected haloacetic acids - Method using gas chromatography (GC-ECD and/or GC-MS detection) after liquid-liquid extraction and derivatization (ISO 23631:2006)	
EN ISO 5667-1:2006	Water quality - Sampling - Part 1: Guidance on the design of sampling programmes and sampling techniques (ISO 5667-1:2006)	
EN ISO 5667-1:2006/AC:2007	Water quality - Sampling - Part 1: Guidance on the design of sampling programmes and sampling techniques (ISO 5667-1:2006)	
EN ISO 5667-3:2003	Water quality - Sampling - Part 3: Guidance on the preservation and handling of water samples (ISO 5667-3:2003)	
EN ISO 5961:1995	Water quality - Determination of cadmium by atomic absorption spectrometry (ISO 5961:1994)	
EN ISO 6468:1996	Water quality - Determination of certain organochlorine insecticides, polychlorinated biphenyls and chlorobenzenes - Gas chromatographic method after liquid-liquid extraction (ISO 6468:1996)	
EN ISO 6878:2004	Water quality - Determination of phosphorus - Ammonium molybdate spectrometric method (ISO 6878:2004)	
EN ISO 7027:1999	Water quality - Determination of turbidity (ISO 7027:1999)	
EN ISO 7887:1994	Water quality - Examination and determination of colour (ISO 7887:1994)	
EN ISO 7980:2000	Water quality - Determination of calcium and magnesium - Atomic absorption spectrometric method (ISO 7980:1986)	

Value	Definition	Short Description
EN ISO 9377-2:2000	Water quality - Determination of hydrocarbon oil index - Part 2: Method using solvent extraction and gas chromatography (ISO 9377-2:2000)	
EN ISO 9562:2004	Water quality - Determination of adsorbable organically bound halogens (AOX) (ISO 9562:2004)	
EN ISO 9963-1:1995	Water quality - Determination of alkalinity - Part 1: Determination of total and composite alkalinity (ISO 9963-1:1994)	
EN ISO 9963-2:1995	Water quality - Determination of alkalinity - Part 2: Determination of carbonate alkalinity (ISO 9963-2:1994)	

4.5.5 LOD_LOQ_Flag codelist

Value	Definition	Short Description
<	sample below limit of quantification	
[	sample below limit of detection	

4.6 Codelists for Hazardous Substances in Lakes - Supportive Determinands table

4.6.1 Country Code codelist

Value	Definition	Short Description
AL	Albania	
AT	Austria	
BA	Bosnia and Herzegovina	
BE	Belgium	
BG	Bulgaria	
CH	Switzerland	
CY	Cyprus	
CZ	Czech Republic	
DE	Germany	
DK	Denmark	
EE	Estonia	
ES	Spain	
FI	Finland	
FR	France	
GB	United Kingdom	
GR	Greece	
HR	Croatia	
HU	Hungary	
IE	Ireland	
IS	Iceland	
IT	Italy	
LI	Liechtenstein	
LT	Lithuania	
LU	Luxembourg	
LV	Latvia	

Value	Definition	Short Description
ME	Montenegro	
MK	Macedonia, the Former Yugoslav Republic of	
MT	Malta	
NL	Netherlands	
NO	Norway	
PL	Poland	
PT	Portugal	
RO	Romania	
RS	Serbia	
SE	Sweden	
SI	Slovenia	
SK	Slovakia	
TR	Turkey	
XK	Kosovo	

4.6.2 Hazardous Substance Supportive Determinand codelist

Value	Definition	Short Description
Ca	Concentration of calcium.	Datatype: float Requested unit: [mg/l]
Cl	Concentration of chloride.	Datatype: float Requested unit: [mg/l]
DOC	Concentration of dissolved organic carbon.	Datatype: float Requested unit: [mg/l]
Hardness	Water hardness	Water hardness is a measure of the magnesium and calcium carbonate concentrations given in calcium carbonate. Datatype: float Requested unit: [mg/l CaCO3]
HCO3	Concentration of hydrogen carbonate.	Datatype: float Requested unit: [mg/l]
K	Concentration of kalium.	Datatype: float Requested unit: [mg/l]
Mg	Concentration of magnesium.	Datatype: float Requested unit: [mg/l]
Na	Concentration of natrium.	Datatype: float Requested unit: [mg/l]
pH	pH = -log[H]	Electronoc pH meters are generally the mos accurate means to measurepH values. Datatype: float Requested unit: [pH]
SO4	Concentration of sulphate.	Datatype: float Requested unit: [mg/l]

Value	Definition	Short Description
SPM	Concentration of suspended particulate matter (such as clay, or other mineral particles, detrital particles, bacteria and algal cells)	Filtration, drying and weighting the filter. Datatype: float Requested unit: [mg/l]
Temperature	Water temperature	Datatype: float Requested unit: [°C] (degrees Celsius)

4.6.3 Unit of Measurement of Hazardous Substances Supportive Determinands codelist

Value	Definition	Short Description
mg/l		
mg/l C	Dissolved Organic Carbon	
mg/l CACO3	Hardness	
pH	pH	
°C	degrees Celsius (Temperature)	

4.7 Codelists for **Biology in Lakes - Aggregated data** table

4.7.1 Country Code codelist

Value	Definition	Short Description
AL	Albania	
AT	Austria	
BA	Bosnia and Herzegovina	
BE	Belgium	
BG	Bulgaria	
CH	Switzerland	
CY	Cyprus	
CZ	Czech Republic	
DE	Germany	
DK	Denmark	
EE	Estonia	
ES	Spain	
FI	Finland	
FR	France	
GB	United Kingdom	
GR	Greece	
HR	Croatia	
HU	Hungary	
IE	Ireland	
IS	Iceland	
IT	Italy	
LI	Liechtenstein	
LT	Lithuania	
LU	Luxembourg	

Value	Definition	Short Description
LV	Latvia	
ME	Montenegro	
MK	Macedonia, the Former Yugoslav Republic of	
MT	Malta	
NL	Netherlands	
NO	Norway	
PL	Poland	
PT	Portugal	
RO	Romania	
RS	Serbia	
SE	Sweden	
SI	Slovenia	
SK	Slovakia	
TR	Turkey	
XK	Kosovo	

4.7.2 Water Category codelist

Value	Definition	Short Description
C	Coastal water (TCM), as defined by the WFD.	
CN	Canal (Rivers)	
LK	Lake (Lakes)	
M	Marine water (TCM)	
RS	Reservoir (Lakes)	
RV	River (Rivers)	
T	Transitional water (TCM), as defined by the WFD.	

4.7.3 Intercalibration waterbody type codelist

Value	Definition	Short Description
L-A1	Lowland, shallow, calcareous, small	
L-A2	Lowland, shallow, calcareous, large	
L-A3	Lowland, shallow, peat, small	
L-AL3	Lowland or mid-altitude, deep, moderate to high alkalinity (alpine influence), large	
L-AL4	Mid-altitude, shallow, moderate to high alkalinity (alpine influence), large	
L-CB1	Lowland, shallow, stratified, calcareous	
L-CB2	Lowland, very shallow, calcareous	
L-CB3	Lowland, shallow, siliceous, vegetation dominated by lobelia	
L-M1	Lowland, shallow, calcareous, large	
L-M5	Reservoirs, deep, large, siliceous, low altitude	
L-M7	Reservoirs, deep, large, siliceous, mid-altitude	
L-M8	Reservoirs, deep, large, calcareous, between low and highland	
L-N1	Lowland, shallow, mod alk, clear	

Value	Definition	Short Description
L-N10	polyhumic, low to moderate alk, shallow, small or medium size, lowland and mid-altitude	
L-N11	polyhumic, low alk, very shallow, lowland	
L-N2a	Lowland, shallow, siliceous, low alkalinity, large	
L-N2b	Lowland, deep, siliceous, low alkalinity, large	
L-N3a	Lowland, shallow, humic, low alk.	
L-N3b	Lowland, shallow, polyhumic, low alk.	
L-N5	Boreal, shallow, clear, large	
L-N6a	Mid-altitude, shallow, humic, low alk.	
L-N6b	Mid-altitude, shallow, polyhumic, low alk.	
L-N7	Highland, shallow, siliceous, low alkalinity, large	
L-N8a	Lowland, shallow, mod alk, humic	
L-N8b	Lowland, shallow, mod alk, polyhumic	
L-N9	large, deep, moderate alk., clear	
R-A1	Pre-alpine - Small to medium, high altitude calcareous	
R-A2	Alpine -Small to medium, high altitude, siliceous	
R-C1	Small lowland siliceous sand	
R-C2	Small lowland siliceous - rock	
R-C3	Small mid-altitude siliceous	
R-C4	Medium lowland mixed	
R-C5	Large lowland mixed	
R-C6	Small, lowland, calcareous	
R-E1	Carpathians: small to medium, mid-altitude	
R-E2	Plains: medium-sized, lowland	
R-E3	Plains: large and very large, lowland	
R-E4	Plains: medium-sized, mid-altitude	
R-E5	Balkans: medium-sized, mid-altitude	
R-E6	Danube River: middle and downstream	
R-M1	Small, mid altitude	
R-M2	Medium, lowland	
R-M3	Large, lowland	
R-M4	Small/Medium Mediterranean mountains	
R-M5	Small Mediterranean temporary	
R-N1	Small lowland siliceous moderate alkalinity, clear	
R-N2	Small-medium lowland siliceous low alkalinity, clear	
R-N3	Smal-medium lowland siliceous low alkalinity, organic (humic)	
R-N4	Medium lowland siliceous moderate alkalinity, clear	
R-N5	Small mid-altitude siliceous low alkalinity, clear	
R-N7	Small highland siliceous low alkalinity, clear	
R-N9	Small - medium mid-altitude siliceous low alkalinity, organic (humic)	

4.7.4 Aggregation Period codelist

Value	Definition	Short Description
Annual	Data aggregated over a year.	
Autumn	Data aggregated over autumn months (~ September, October, November).	
GrowingSeason	Data aggregated over the growing season for phytoplankton (normally April-October, but may vary among countries)	
Spring	Data aggregated over spring months (~ March, April, May).	
Summer	Data aggregated over summer months (~ June, July, August).	
Winter	Data aggregated over winter months (~ December, January, February).	

4.7.5 Determinand name for biological metrics codelist

Value	Definition	Short Description
AngiospermsEQR	Ecologial Quality Ratio for national angiosperms metric used as indicator of the pressure	TC waters only. MetricScale: EQR.
CharaphytesPresence	Values 0 (absence) or 1 (presence). (Can be decimal number if averaged over multiple stations.)	Moderate-high-alkalinity lakes only. MetricScale: Original.
Chlorophyll_a	Phytoplankton chlorophyll a. Unit: µg/l	Lakes and TC waters only. MetricScale: Original.
CyanobacteriaBiomass	Total biomass of cyanobacteria. Unit: mg/l	Lakes only. MetricScale: Original.
CyanobacteriaProportion	Proportion cyanobacteria of the total phytplanktonbiomass (excluding Chroococcales, but including Microcystis and Woronichinia). Unit: proportion (range 0-1).	Lakes only. MetricScale: Original.
InvertebrateEQR	Ecologial Quality Ratio for national invertebrate metric used as indicator of the pressure	TC waters only. MetricScale: EQR.
InvertebrateEQR_A	Ecologial Quality Ratio for national invertebrate metric used as indicator of the pressure Acidification.	Rivers only. MetricScale: EQR.
InvertebrateEQR_E	Ecologial Quality Ratio for national invertebrate metric used as indicator of the pressure Eutrophication.	Rivers only. MetricScale: EQR.
InvertebrateEQR_G	Ecologial Quality Ratio for national invertebrate metric used as indicator of the pressure General degradation.	Rivers only. MetricScale: EQR.
InvertebrateEQR_H	Ecologial Quality Ratio for national invertebrate metric used as indicator of the pressure Hydromorphology.	Rivers only. MetricScale: EQR.
IsoetidesPresence	Values 0 (absence) or 1 (presence). (Can be decimal number if averaged over multiple stations.)	Low-moderate-alkalinity lakes only. MetricScale: Original.
MacroalgaeEQR	Ecologial Quality Ratio for national macroalgae metric used as indicator of the pressure	TC waters only. MetricScale: EQR.
MacrophyteDepthLimit	Depth limit of lake macrophytes. Unit: m	Lakes only. MetricScale: Original.

Value	Definition	Short Description
MacrophyteEQR_A	Ecologial Quality Ratio for national macrophyte metric used as indicator of the pressure Acidification.	Lakes only. MetricScale: EQR.
MacrophyteEQR_E	Ecologial Quality Ratio for national macrophyte metric used as indicator of the pressure Eutrophication.	Lakes only. MetricScale: EQR.
MacrophyteEQR_G	Ecologial Quality Ratio for national macrophyte metric used as indicator of the pressure General degradation.	Lakes only. MetricScale: EQR.
MacrophyteEQR_H	Ecologial Quality Ratio for national macrophyte metric used as indicator of the pressure Hydromorphology.	Lakes only. MetricScale: EQR.
PhytobenthosEQR_A	Ecologial Quality Ratio for national phytobenthos metric used as indicator of the pressure Acidification.	Rivers only. MetricScale: EQR.
PhytobenthosEQR_E	Ecologial Quality Ratio for national phytobenthos metric used as indicator of the pressure Eutrophication.	Rivers only. MetricScale: EQR.
PhytobenthosEQR_G	Ecologial Quality Ratio for national phytobenthos metric used as indicator of the pressure General degradation.	Rivers only. MetricScale: EQR.
PhytobenthosEQR_H	Ecologial Quality Ratio for national phytobenthos metric used as indicator of the pressure Hydromorphology.	Rivers only. MetricScale: EQR.
PhytoplanktonBloomsEQR	Ecologial Quality Ratio for national phytoplankton blooms metric used as indicator of the pressure	TC waters only. MetricScale: EQR.
PhytoplanktonEQR_A	Ecologial Quality Ratio for national phytoplankton metric used as indicator of the pressure Acidification.	Lakes only. MetricScale: EQR.
PhytoplanktonEQR_E	Ecologial Quality Ratio for national phytoplankton metric used as indicator of the pressure Eutrophication.	Lakes only. MetricScale: EQR.
PhytoplanktonEQR_G	Ecologial Quality Ratio for national phytoplankton metric used as indicator of the pressure General degradation.	Lakes only. MetricScale: EQR.
PhytoplanktonEQR_H	Ecologial Quality Ratio for national phytoplankton metric used as indicator of the pressure Hydromorphology.	Lakes only. MetricScale: EQR.
TotalPhytoplanktonBiomass	Total phytoplankton biomass. Unit: mg/l	Lakes only. MetricScale: Original.

4.7.6 Unit of Biological Metrics codelist

Value	Definition	Short Description
m		
mg/l		
Presence	Values 0 (absence) or 1 (presence).	
Proportion	Proportion cyanobacteria biomass of the total phytplanktonbiomass (excluding Chroococcales, but including Microcystis and Woronichinia). Range: 0 - 1.	
Ratio	For EQR: Metric value divided by reference value. Range: 0 - 1 (can in certain cases exceed 1 for High status class).	

Value	Definition	Short Description
µg/l		

4.7.7 Biological Quality Element codelist

Value	Definition	Short Description
AN	Angiosperms	TC waters only
MA	Macroalgae	TC waters only
MI	Macroinvertebrate	Rivers or TC waters only
MP	Macrophyte	Lakes only
PB	Phytobenthos	Rivers only
PP	Phytoplankton	Lakes or TC waters only

4.7.8 Scale of biological metric codelist

Value	Definition	Short Description
EQR	Ecologial Quality Ratio (calculated by data provider as biological metric value in original metric scale divided by reference condition in original metric scale).	
Original	The original scale of the metric.	

4.7.9 Ecological status class per biological determinand codelist

Value	Definition	Short Description
B	Bad ecological status, as defined by the WFD	
G	Good ecological status, as defined by the WFD	
GEP	Good ecological potential (for artificial and heavily modified waterbodies), as defined by the WFD	
H	High ecological status, as defined by the WFD	
M	Moderate ecological status, as defined by the WFD	
MaxEP	Maximum ecological potential (for artificial and heavily modified waterbodies)	
MPB	Moderate, poor or bad status or potential (to be used in cases where more exact classification is not available)	
P	Poor ecological status, as defined by the WFD	

4.8 Codelists for Classification system for Ecological Status Classes in Lakes table

4.8.1 Country Code codelist

Value	Definition	Short Description
AL	Albania	
AT	Austria	
BA	Bosnia and Herzegovina	
BE	Belgium	

Value	Definition	Short Description
BG	Bulgaria	
CH	Switzerland	
CY	Cyprus	
CZ	Czech Republic	
DE	Germany	
DK	Denmark	
EE	Estonia	
ES	Spain	
FI	Finland	
FR	France	
GB	United Kingdom	
GR	Greece	
HR	Croatia	
HU	Hungary	
IE	Ireland	
IS	Iceland	
IT	Italy	
LI	Liechtenstein	
LT	Lithuania	
LU	Luxembourg	
LV	Latvia	
ME	Montenegro	
MK	Macedonia, the Former Yugoslav Republic of	
MT	Malta	
NL	Netherlands	
NO	Norway	
PL	Poland	
PT	Portugal	
RO	Romania	
RS	Serbia	
SE	Sweden	
SI	Slovenia	
SK	Slovakia	
TR	Turkey	
XK	Kosovo	

4.8.2 Water Category codelist

Value	Definition	Short Description
C	Coastal water (TCM), as defined by the WFD.	
CN	Canal (Rivers)	
LK	Lake (Lakes)	
M	Marine water (TCM)	
RS	Reservoir (Lakes)	
RV	River (Rivers)	
T	Transitional water (TCM), as defined by the WFD.	

4.8.3 Determinand name for biological metrics codelist

Value	Definition	Short Description
AngiospermsEQR	Ecologial Quality Ratio for national angiosperms metric used as indicator of the pressure	TC waters only. MetricScale: EQR.
CharaphytesPresence	Values 0 (absence) or 1 (presence). (Can be decimal number if averaged over multiple stations.)	Moderate-high-alkalinity lakes only. MetricScale: Original.
Chlorophyll_a	Phytoplankton chlorophyll a. Unit: µg/l	Lakes and TC waters only. MetricScale: Original.
CyanobacteriaBiomass	Total biomass of cyanobacteria. Unit: mg/l	Lakes only. MetricScale: Original.
CyanobacteriaProportion	Proportion cyanobacteria of the total phytplanktonbiomass (excluding Chroococcales, but including Microcystis and Woronichinia). Unit: proportion (range 0-1).	Lakes only. MetricScale: Original.
InvertebrateEQR	Ecologial Quality Ratio for national invertebrate metric used as indicator of the pressure	TC waters only. MetricScale: EQR.
InvertebrateEQR_A	Ecologial Quality Ratio for national invertebrate metric used as indicator of the pressure Acidification.	Rivers only. MetricScale: EQR.
InvertebrateEQR_E	Ecologial Quality Ratio for national invertebrate metric used as indicator of the pressure Eutrophication.	Rivers only. MetricScale: EQR.
InvertebrateEQR_G	Ecologial Quality Ratio for national invertebrate metric used as indicator of the pressure General degradation.	Rivers only. MetricScale: EQR.
InvertebrateEQR_H	Ecologial Quality Ratio for national invertebrate metric used as indicator of the pressure Hydromorphology.	Rivers only. MetricScale: EQR.
IsoetidesPresence	Values 0 (absence) or 1 (presence). (Can be decimal number if averaged over multiple stations.)	Low-moderate-alkalinity lakes only. MetricScale: Original.
MacroalgaeEQR	Ecologial Quality Ratio for national macroalgae metric used as indicator of the pressure	TC waters only. MetricScale: EQR.
MacrophyteDepthLimit	Depth limit of lake macrophytes. Unit: m	Lakes only. MetricScale: Original.
MacrophyteEQR_A	Ecologial Quality Ratio for national macrophyte metric used as indicator of the pressure Acidification.	Lakes only. MetricScale: EQR.
MacrophyteEQR_E	Ecologial Quality Ratio for national macrophyte metric used as indicator of the pressure Eutrophication.	Lakes only. MetricScale: EQR.
MacrophyteEQR_G	Ecologial Quality Ratio for national macrophyte metric used as indicator of the pressure General degradation.	Lakes only. MetricScale: EQR.
MacrophyteEQR_H	Ecologial Quality Ratio for national macrophyte metric used as indicator of the pressure Hydromorphology.	Lakes only. MetricScale: EQR.
PhytobenthosEQR_A	Ecologial Quality Ratio for national phytobenthos metric used as indicator of the pressure Acidification.	Rivers only. MetricScale: EQR.

Value	Definition	Short Description
PhytobenthosEQR_E	Ecologial Quality Ratio for national phytobenthos metric used as indicator of the pressure Eutrophication.	Rivers only. MetricScale: EQR.
PhytobenthosEQR_G	Ecologial Quality Ratio for national phytobenthos metric used as indicator of the pressure General degradation.	Rivers only. MetricScale: EQR.
PhytobenthosEQR_H	Ecologial Quality Ratio for national phytobenthos metric used as indicator of the pressure Hydromorphology.	Rivers only. MetricScale: EQR.
PhytoplanktonBloomsEQR	Ecologial Quality Ratio for national phytoplankton blooms metric used as indicator of the pressure	TC waters only. MetricScale: EQR.
PhytoplanktonEQR_A	Ecologial Quality Ratio for national phytoplankton metric used as indicator of the pressure Acidification.	Lakes only. MetricScale: EQR.
PhytoplanktonEQR_E	Ecologial Quality Ratio for national phytoplankton metric used as indicator of the pressure Eutrophication.	Lakes only. MetricScale: EQR.
PhytoplanktonEQR_G	Ecologial Quality Ratio for national phytoplankton metric used as indicator of the pressure General degradation.	Lakes only. MetricScale: EQR.
PhytoplanktonEQR_H	Ecologial Quality Ratio for national phytoplankton metric used as indicator of the pressure Hydromorphology.	Lakes only. MetricScale: EQR.
TotalPhytoplanktonBiomass	Total phytoplankton biomass. Unit: mg/l	Lakes only. MetricScale: Original.

4.8.4 Biological Quality Element codelist

Value	Definition	Short Description
AN	Angiosperms	TC waters only
MA	Macroalgae	TC waters only
MI	Macroinvertebrate	Rivers or TC waters only
MP	Macrophyte	Lakes only
PB	Phytobenthos	Rivers only
PP	Phytoplankton	Lakes or TC waters only

4.8.5 Physicochemical impact for biological determinand codelist

Value	Definition	Short Description
Acidification		
Eutrophication		
General degradation		
Hydromorphology		

4.8.6 Heavily modified water body codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.8.7 Artificial water body codelist

Value	Definition	Short Description
false	Value auto-created by DD	Auto-created by DD
true	Value auto-created by DD	Auto-created by DD

4.8.8 Intercalibration status of the biological determinand codelist

Value	Definition	Short Description
no	Biological determinand has not been intercalibrated.	
yes	Biological determinand has been intercalibrated.	

4.8.9 Intercalibration status of the class boundaries of the biological determinand codelist

Value	Definition	Short Description
no	Class boundaries of the biological determinand are not correct for the given waterbody type, according to the intercalibration.	
yes	Class boundaries of the biological determinand are correct for the given waterbody type, according to the intercalibration.	

4.8.10 Intercalibration status of the waterbody type codelist

Value	Definition	Short Description
no	Waterbody type has not been included in intercalibration.	
yes	Waterbody type has been included in intercalibration.	