

## WISE WFD Reference Spatial Datasets reported under Water Framework Directive 2010 - PUBLIC VERSION - version 1.3, Apr. 2019

The dataset contains information on the European river basin districts, the river basin district sub-units, the surface water bodies and the groundwater bodies delineated for the 1st River Basin Management Plans (RBMP) under the Water Framework Directive (WFD) as well as the European monitoring sites used for the assessment of the status of the abovementioned surface water bodies and groundwater bodies.

The information was reported to the European Commission under the Water Framework Directive (WFD) reporting obligations.

The dataset compiles the available spatial data related to the 1st RBMPs which were due in 2010 (hereafter WFD2010). See [http://rod.eionet.europa.eu/obligations/521\\_for\\_further\\_information\\_on\\_the\\_WFD2010\\_reporting](http://rod.eionet.europa.eu/obligations/521_for_further_information_on_the_WFD2010_reporting).

It was prepared to support the reporting of the 2nd RBMPs due in 2016 (hereafter WFD2016).

See [http://rod.eionet.europa.eu/obligations/715\\_for\\_further\\_information\\_on\\_the\\_WFD2016\\_reporting](http://rod.eionet.europa.eu/obligations/715_for_further_information_on_the_WFD2016_reporting).

The data reported in WFD2010 were updated using data reported in WFD2016, whenever the spatial objects are identical in 2010 and 2016. For WFD2010 objects, some information may be missing, if the objects no longer exist in the 2nd River Basin Management Plans, and were not reported in WFD2016.

Relevant concepts:

**River basin district (RBD):** The area of land and sea, made up of one or more neighbouring river basins together with their associated groundwaters and coastal waters, which is the main unit for management of river basins.

**River basin:** The area of land from which all surface run-off flows through a sequence of streams, rivers and, possibly, lakes into the sea at a single river mouth, estuary or delta.

**Sub-basin:** The area of land from which all surface run-off flows through a series of streams, rivers and, possibly, lakes to a particular point in a water course (normally a lake or a river confluence).

**Sub-unit [Operational definition. Not in the WFD]:** Reporting unit. River basin districts larger than 50000 square kilometre should be divided into comparable sub-units with an area between 5000 and 50000 square kilometre. The sub-units should be created using river basins (if more than one river basin exists in the RBD), set of contiguous river basins, or sub-basins, for example. If the RBD area is less than 50000 square kilometre, the RBD itself should be used as a sub-unit.

**Surface water body:** Body of surface water means a discrete and significant element of surface water such as a lake, a reservoir, a stream, river or canal, part of a stream, river or canal, a transitional water or a stretch of coastal water.

**Surface water:** Inland waters, except groundwater; transitional waters and coastal waters, except in respect of chemical status for which it shall also include territorial waters.

**Inland water:** All standing or flowing water on the surface of the land, and all groundwater on the landward side of the baseline from which the breadth of territorial waters is measured.

**River:** Body of inland water flowing for the most part on the surface of the land but which may flow underground for part of its course.

**Lake:** Body of standing inland surface water.

**Transitional waters:** Bodies of surface water in the vicinity of river mouths which are partly saline in character as a result of their proximity to coastal waters but which are substantially influenced by freshwater flows.

**Coastal water:** Surface water on the landward side of a line, every point of which is at a distance of one nautical mile on the seaward side from the nearest point of the baseline from which the breadth of territorial waters is measured, extending where appropriate up to the outer limit of transitional waters.

**Territorial sea:** The territorial waters, or territorial sea as defined by the 1982 United Nations Convention on the Law of the Sea, extend up to a limit not exceeding 12 nautical miles (22.2 km), measured from the baseline. The normal baseline is the low-water line along the coast.

Territorial waters [Operational definition. Not in WFD.]: Reporting unit. The zone between the limit of the coastal water bodies and the limit of the territorial sea, geometrically subdivided in Thiessen polygons according to the adjacent coastal sub-unit (or using any alternative delineation provided by the national competent authorities), and assigned to an adjacent sub-unit for the purpose of reporting the chemical status of the territorial waters under the Water Framework Directive.

Groundwater body: 'Body of groundwater' means a distinct volume of groundwater within an aquifer or aquifers.

Groundwater: All water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil. Aquifer: Subsurface layer or layers of rock or other geological strata of sufficient porosity and permeability to allow either a significant flow of groundwater or the abstraction of significant quantities of groundwater.

Monitoring site: [Operational definition. Not in the WFD] Monitoring point included in a WFD surveillance, operational or investigative monitoring programme.

Simple

Date (Creation)	2019-04-15				
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Date (Publication)	2019-04-15				
Edition	01.03				
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Status	Superseded				
Point of contact	Organisation name	Individual name	Electronic mail address	Website	Role
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No information provided.

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No information provided.

Maintenance and update frequency	As needed
GEMET - INSPIRE themes, version 1.0	<ul style="list-style-type: none"><li>Area management/restriction/regulation zones and reporting units</li><li>Environmental monitoring facilities</li></ul>
Keywords	
GEMET	<ul style="list-style-type: none"><li>water resources management</li><li>surface water</li><li>river basin</li><li>river basin management</li></ul>

	<ul style="list-style-type: none"><li>• water (geographic)</li><li>• groundwater</li><li>• aquifer</li><li>• monitoring station</li><li>• water body</li></ul>
Continents, countries, sea regions of the world.	<ul style="list-style-type: none"><li>• Germany</li><li>• Ireland</li><li>• Poland</li><li>• Estonia</li><li>• Norway</li><li>• Latvia</li><li>• Cyprus</li><li>• Spain</li><li>• Iceland</li><li>• Romania</li><li>• Luxembourg</li><li>• Malta</li><li>• Czechia</li><li>• Austria</li><li>• Hungary</li><li>• Portugal</li><li>• Sweden</li><li>• Netherlands</li><li>• Croatia</li><li>• Greece</li><li>• Slovenia</li><li>• Slovakia</li><li>• Belgium</li><li>• Bulgaria</li><li>• France</li><li>• Finland</li><li>• Italy</li><li>• Denmark</li></ul>
WISE metadata keywords, version 1.0, 2009-10-01	<ul style="list-style-type: none"><li>• Water Information System for Europe (WISE)</li><li>• Water Framework Directive (WFD)</li><li>• River basin district</li><li>• Sub unit</li><li>• Monitoring station</li><li>• Groundwater body</li><li>• Surface water body</li><li>• Surface water</li></ul>

	<ul style="list-style-type: none"> <li>Water body</li> </ul>
<b>INSPIRE - Feature Concept Dictionary, version 3</b>	<ul style="list-style-type: none"> <li>River Basin</li> <li>WFD Surface Water Body</li> <li>WFD Ground Water Body</li> <li>Surface Water</li> <li>WFD Coastal Water</li> <li>WFD Lake</li> <li>WFD River</li> <li>WFD Transitional Water</li> </ul>
<b>Keywords</b>	<ul style="list-style-type: none"> <li></li> </ul>
<b>INSPIRE priority data set</b>	<ul style="list-style-type: none"> <li>Surface water bodies (Water Framework Directive)</li> <li>Groundwater bodies (Water Framework Directive)</li> <li>Coastal waters (Water Framework Directive)</li> <li>Lakes (Water Framework Directive)</li> <li>Rivers (Water Framework Directive)</li> <li>River basin districts sub-units (Water Framework Directive)</li> <li>River network (Water Framework Directive)</li> <li>River basin districts (Water Framework Directive)</li> <li>Water bodies (Water Framework Directive)</li> <li>Monitoring stations (Water Framework Directive)</li> <li>Directive 2000/60/EC</li> </ul>
<b>Spatial scope</b>	<ul style="list-style-type: none"> <li>European</li> </ul>
<b>EEA topics</b>	<ul style="list-style-type: none"> <li>Water</li> </ul>
<b>Access constraints</b>	Other restrictions
<b>Other constraints</b>	<a href="#">no limitations to public access</a>
<b>Use constraints</b>	Other restrictions
<b>Other constraints</b>	For further information and specification regarding the use limitations and constraints please consult the file WISE_WFD_ReferenceSpatialDataSets_2019-04-15.pdf which is provided together with the data.
<b>Aggregate Datasetidentifier</b>	e9457773-8200-4a6e-a08c-e21ad6618537
<b>Association Type</b>	revision of
<b>Aggregate Datasetidentifier</b>	0d7b3d8f-084c-4c26-8c0c-fc43232cb80a
<b>Association Type</b>	revision of
<b>Aggregate Datasetidentifier</b>	d4f15ee2-2c70-465f-8eaf-8e679692949a
<b>Association Type</b>	revision of
<b>Aggregate Datasetidentifier</b>	75993663-c826-455b-bf8f-21b1254bec31
<b>Association Type</b>	Cross reference

Spatial representation type	Vector
Denominator	250000
Language of dataset	English
Character set	UTF8
Topic category	<ul style="list-style-type: none"><li>• Environment</li><li>• Inland waters</li><li>• Geoscientific information</li></ul>

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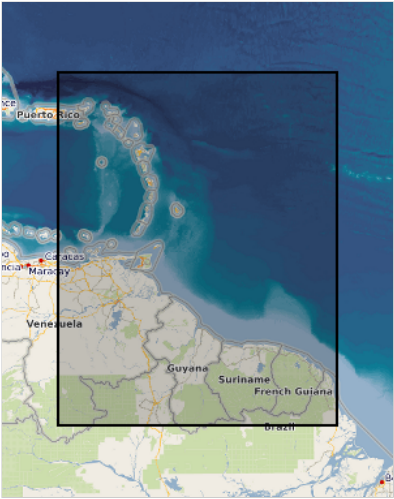


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Begin date	2010-03-19		
End date	2019-03-31		
Coordinate reference system identifier	<a href="#">EPSG:4326</a>		
Distribution format	<ul style="list-style-type: none"> <li>• SHP ( 1 )</li> <li>• Geopackage ( )</li> </ul>		
OnLine resource	<b>Protocol</b> EEA:FOLDERPATH  WWW:URL	<b>Linkage</b> <a href="https://sdi.eea.europa.eu/webdav/datastore/public/eea_v_4326_250_k_wise-wfd2010_p_2010-2019_v01_r03/">https://sdi.eea.europa.eu/webdav/datastore/public/eea_v_4326_250_k_wise-wfd2010_p_2010-2019_v01_r03/</a> <a href="https://sdi.eea.europa.eu/data/b15c7595-8e41-45ff-b657-a62f411e3f42">https://sdi.eea.europa.eu/data/b15c7595-8e41-45ff-b657-a62f411e3f42</a>	<b>Name</b>   Direct download
Hierarchy level	Dataset		

## Conformance result

Date (Publication)	2010-12-08
Explanation	See the referenced specification

Statement	<p>1) Data model</p> <p>The data set follows the WISE spatial data model described in the WISE GIS guidance, available at <a href="http://cdr.eionet.europa.eu/help/WFD/WFD_521_2016/GISGuidance/WISE_GISGuidance.pdf">http://cdr.eionet.europa.eu/help/WFD/WFD_521_2016/GISGuidance/WISE_GISGuidance.pdf</a></p> <p>The formal specification is available at <a href="http://cdr.eionet.europa.eu/help/WFD/WFD_521_2016/UML/GML_Schemas_6.0.6.zip">http://cdr.eionet.europa.eu/help/WFD/WFD_521_2016/UML/GML_Schemas_6.0.6.zip</a></p> <p>The shapefile templates are available at <a href="http://cdr.eionet.europa.eu/help/WFD/WFD_521_2016/Shapes/Shapefiles_6.0.6.zip">http://cdr.eionet.europa.eu/help/WFD/WFD_521_2016/Shapes/Shapefiles_6.0.6.zip</a></p> <p>Refer to the WISE GIS guidance for the mapping between the GML elements in the XML schema and the corresponding fields in Shapefile format.</p> <p>Refer to the Technical Report which accompanies the data set for information on the additional fields present in the shapefiles: cYear, country, lat, lon, statusCode, statusDate, remarks and qcCheck.</p> <p>2) Data sources</p> <p>Information on river basin districts and sub-units was submitted under the "Water Framework Directive - River Basin Districts and Competent Authorities" [Article 3] reporting obligation ( <a href="http://rod.eionet.europa.eu/obligations/">http://rod.eionet.europa.eu/obligations/</a> 525). Data originally delivered in 2004 and 2005 was moved to the Central Data Repository ( <a href="http://cdr.eionet.europa.eu/">http://cdr.eionet.europa.eu/</a> ), which contains information from the EU-28 Member States plus Norway, reported between 2007-03-11 and 2012-06-22 (including resubmissions and updates).</p>
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Information on surface water bodies (rivers, lakes, transitional and coastal water bodies - including artificial and heavily modified water bodies), groundwater bodies and protected areas was reported under the "Water Framework Directive - Characterisation of River Basin Districts" [Article 5] reporting obligation ( <http://rod.eionet.europa.eu/obligations/136> ). Data originally delivery in 2004 and 2005 was moved to the Central Data Repository ( <http://cdr.eionet.europa.eu/> ), which contains information from the EU-28 Member States (except Croatia, Greece, Malta and Romania), plus Norway, reported between 2005-01-26 and 2011-09-26 (including resubmissions and updates).

Information on monitoring sites was reported under the "Water Framework Directive - Monitoring Programmes" [Article 8] reporting obligation ( <http://rod.eionet.europa.eu/obligations/520> ). The Central Data Repository ( <http://cdr.eionet.europa.eu/> ) contains information from the EU-28 Member States (except Croatia and Malta) reported between 2007-03-16 and 2012-03-21 (including resubmissions and updates).

For some countries or river basin districts, updates to the spatial data were submitted under "Water Framework Directive - River Basin Management Plans - 2010 Reporting" [Article 13] reporting obligation ( [http://rod.eionet.europa.eu/obligations/ 521](http://rod.eionet.europa.eu/obligations/521)). The reporting of the 1st River Basin Management Plans was first due in 2010-03-23. The Central Data Repository ( <http://cdr.eionet.europa.eu/> ) contains information from the EU-28 Member States plus Norway, reported between 2009-09-14 and 2016-03-17 (including resubmissions and updates).

The data sources above will hereafter be referred to as WFD2010.

For the 2nd River Basin Management Plans, spatial data was reported under the "Water Framework Directive - River Basin Management Plans - 2016 Spatial data" (hereafter WFD2016). See [http://rod.eionet.europa.eu/obligations/717\\_for\\_further\\_information\\_on\\_the\\_reporting](http://rod.eionet.europa.eu/obligations/717_for_further_information_on_the_reporting) .

Refer to the Technical Report for the full list of the national CDR data sets integrated into the European data set.

### 3) Data processing

The data reported in WFD2010 were updated using data reported in WFD2016, whenever the spatial objects are identical in 2010 and 2016.

Identical objects have wiseEvolutionType in ('noChange','changeCode','change').

For WFD2010 objects, some information may be missing, if the objects no longer exist in the 2nd River Basin Management Plans, and were not reported in WFD2016. Objects that no longer exist in 2016 have wiseEvolutionType = 'deletion'.

Refer to the Technical Report which accompanies the data set for further information.

### 4) Data quality

THIS DATASET DOES NOT FULLY COMPLY WITH THE WISE SPATIAL DATA MODEL SPECIFICATION.

The reason for non-compliance is that not all the information required by the WISE spatial data model was requested in the WFD2010 reporting. Where available, the missing information was compiled from the WFD2010 non-spatial reporting or from the WFD2016 reporting.

All objects reported in the WFD2010 non-spatial data files are included in the current dataset. The geometry of the objects was obtained from the spatial data files, where available. A conventional geometry was included for the objects for which only the location of the representative point was available.

Note that:

- The WFD2010 reporting requested only the location of a representative point (for example, a centroid) for some objects, e.g. for water bodies. For example, the WFD2010 spatial data files include the geometry of large water bodies, but normally do not include smaller water bodies.

- The WFD2010 spatial data files sometimes include the geometry of objects that were not later reported as water bodies (i.e. as units of management for the 1st RBMP). Spatial objects without equivalence in the non-spatial reporting were excluded from the current dataset.

- The WFD2010 spatial data files were reported as shapefiles and were not subject to automated quality control upon delivery, automated harvest, or version-control management. Partial updates (per dataset and per river basin district) were submitted until 2016-03-17.

Traceability from a spatial object in the dataset to a specific data element and data file in a Central Data Repository delivery is not possible. Specific issues or inconsistencies were clarified with the support of the WFD2016 national reporting contacts.

No geometric or topological error correction was performed.

Basic automated editing of string values (upper-casing, trimming, removal of invalid characters or values) was performed.

The compliance of the identifiers of the spatial objects with the requirements of the WFD2016 was verified.

Thematic identifiers must start with the ISO 3166-1 alpha-2 country code, except for Greece ('EL') and the United Kingdom ('UK').

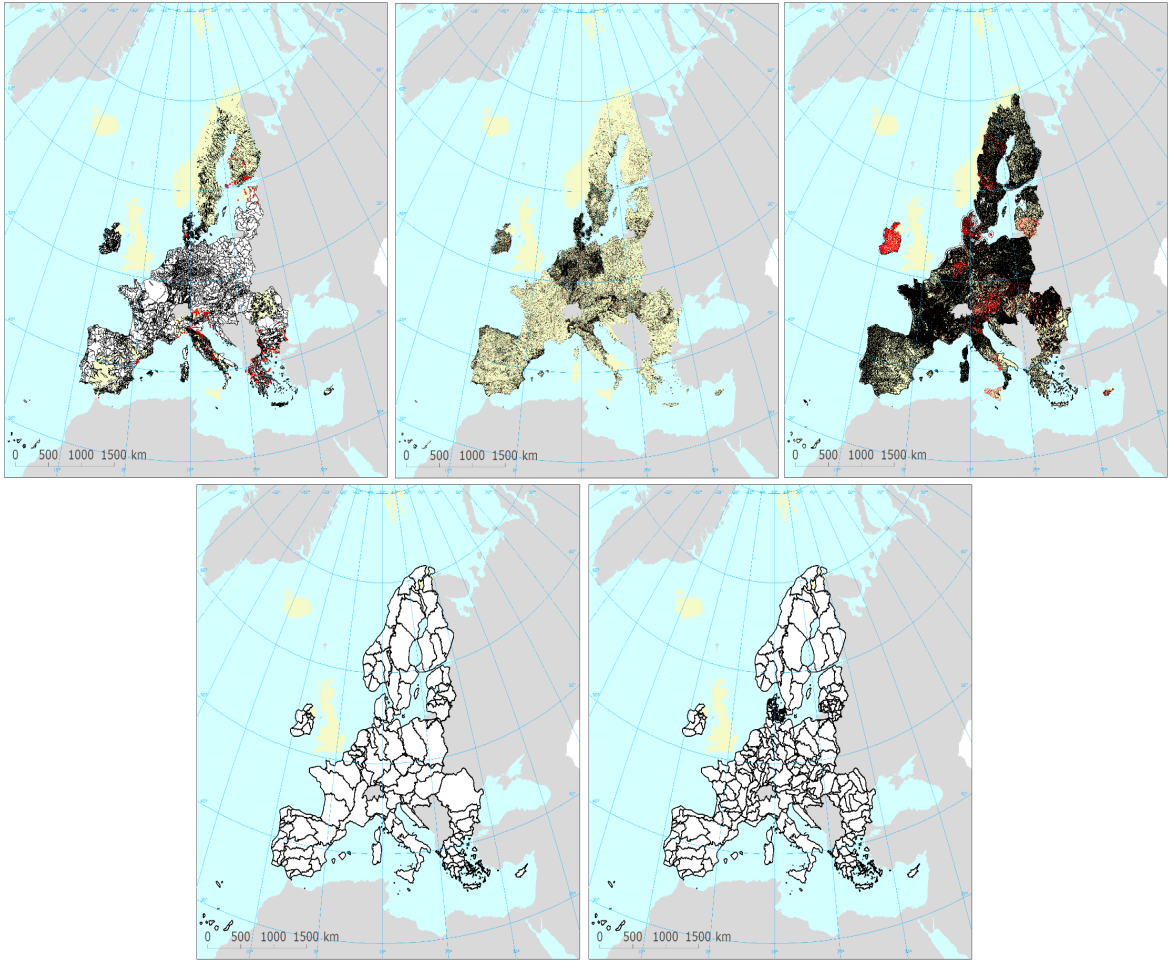
Thematic identifiers must comply with the following Regex pattern: `^[A-Z]{2}[0-9A-Z]{1}([0-9A-Z_-]{0,38}[0-9A-Z]{1}){0,1}$`

A valid identifier was proposed for each invalid identifier. The changes can be traced via the WISE registers.

Metadata

File identifier	b15c7595-8e41-45ff-b657-a62f411e3f42 <a href="#">XML</a>		
Metadata language	English		
Character set	UTF8		
Hierarchy level	Dataset		
Date stamp	2020-07-10T17:40:24		
Metadata standard name	ISO 19115/19139		
Metadata standard version	1.0		
Metadata author	Organisation name	Individual name	Electronic mail addressWebsite Role
	European Environment Agency		sdi@eea.europa.euPoint of contact

Overviews



Provided by

