EEA geospatial data catalogue

Waterbase - Biology, 2025

Waterbase serves as the EEA's central database for managing and disseminating data regarding the status and quality of Europe's rivers, lakes, groundwater bodies, transitional, coastal, and marine waters. It also includes information on the quantity of Europe's water resources and the emissions from point and diffuse sources of pollution into surface waters.

Specifically, Waterbase - Biology focuses on biology data from rivers, lakes, transitional and coastal waters collected annually through the Water Information System for Europe (WISE) – State of Environment (SoE) reporting framework. The data are expected to be collected within monitoring programs defined under the Water Framework Directive (WFD) and used in the classification of the ecological status or potential of rivers, lakes, transitional and coastal water bodies.

These datasets provide harmonised, quality-assured biological monitoring data reported by EEA member and cooperating countries, as Ecological Quality Ratios (EQRs) from all surface water categories (rivers, lakes, transitional and coastal waters).

Note: This dataset references the "WISE EIONET Spatial Datasets - PUBLIC VERSION - version 1.9, Nov. 2024" (https://sdi.eea.europa.eu/catalogue/srv/eng/catalog.search#/metadata/43c386e6-4d0f-4364-9f8c-52edf7dd32fd)

Simple

Identification info

Date (Creation)	2025-05-30T07:12:44+00:00
Date (Publication)	2025-07-02T07:12:44+00:00
Edition	02.00
Citation identifier	eea_t_waterbase-biology_p_1990-2023_v02_r00
Citation identifier	waterbase-biology-1
Citation identifier	DAT-241-en
Status	Superseded
Point of contact	**Organisation** / **Individual** / **Electronic mail address** / **Website** / **Role** European Environment Agency / / / / Point of contact European Environment Agency / / / http://www.eea.europa.eu#organization / Publisher European Environment Agency / / / http://www.eea.europa.eu / Processor
Topic category	• Environment

Extent

Temporal extent

Time period	2012-01-01 2023-12-31
Maintenance and update frequency	Annually
Reporting obligations	• WISE SoE - Biology data (WISE-2)
EEA Management Plan	• 2024 1.1.6

EEA topics	• Water
GEMET	• in situ
Continents, countries, sea regions of the world.	• Lithuania • Cyprus • Luxembourg • Netherlands • Bulgaria • Poland • Hungary • Spain • Austria • Slovakia • Croatia • Norway • Germany • Belgium • Denmark • Romania • France • Switzerland • Portugal • Greece • Finland • Latvia • Malta • Ireland • Italy • Estonia • Slovenia • Sweden

Resource constraints

Use constraints	Other restrictions
Other constraints	License CC-BY 4.0 (https://creativecommons.org/licenses/by/4.0/). Copyright holder: European Environment Agency (EEA).

Resource constraints

Access constraints	Other restrictions
Other constraints	No limitations to public access

Associated resource

Association Type	Cross reference
Metadata Reference	• WISE EIONET Spatial Datasets - PUBLIC VERSION - version 1.9, Nov. 2024

Language	English

Distribution Information

Distribution format	• Spatialite • ascii (.csv, .txt, .sql)
OnLine resource	https://sdi.eea.europa.eu/webdav/datastore/public/eea_t_waterbase-biology_p_1990-2023_v02_r00
OnLine resource	Direct download The dataset contains normalised EQR (environmental quality ratio) values for biological quality elements (BQEs) such as phytoplankton, phytobenthos, macroalgae, angiosperms, macroinvertebrates and/or fish in rivers, lakes, transitional and/or coastal waters. A list of spatial object identifiers with selected attributes, reported through WFD and WISE Spatial data reporting, is added to

	dataset as spatial reference. The data has been compiled and processed by EEA. Please refer to the metadata for additional information.
OnLine resource	Dataset definition for spatial objects
OnLine resource	Dataset definition for EQR classification procedure
OnLine resource	Dataset definition for EQR data
OnLine resource	Dataset definition for EQR data by water body
OnLine resource	State of Water 2024 report EEA Report

Resource lineage

Statement	The Waterbase - Biology contains biological data in rivers, lakes, transitional and coastal waters, which is reported as Ecological Quality Ratios (EQRs): as national EQR values (together with information on the national classification system – class boundaries in national EQR scale) or as normalised EQR values. Data reported as national EQRs is converted to normalised EQRs by the EEA. The main purpose of these datasets is to provide a consistent and comparable basis for assessing the biological quality of surface waters across Europe. The datasets contain normalised EQR values for biological quality elements (BQEs) such as phytoplankton, phytobenthos, macroalgae, angiosperms, macroinvertebrates and/or fish in rivers, lakes, transitional and/or coastal waters. The data was delivered between 2012 and 2024 by EEA member countries and cooperating countries, in the scope of the current WISE SoE - Biology (WISE-2) reporting obligation and the retired WISE SoE - Water Quality (WISE-4), River quality (EWN-1) and Lake quality (EWN-2) reporting obligations. Data are submitted by national environmental authorities through the Eionet Central Data Repository (CDR) and Reportnet using standardized templates and guidance. The reporting follows the WISE SoE – Biology data specifications, ensuring consistency in data structure, terminology, and quality control across countries. The national data deliveries are compiled into a European-wide Waterbase. The data is used for EEA core set indicators that assess the state, trends in water related pressures and monitor the progress of European policy objectives.
Hierarchy level	Dataset

Metadata

Metadata identifier	23eeb67a-1d04-4d17-b3cb-7fa2eef0daf7
Language	English
Character encoding	UTF8
Contact	**Organisation**: European Environment Agency **Individual**: **Electronic mail address**: sdi@eea.europa.eu **Website**: **Role**: Point of contact

Type of resource

Resource type	Non geographic dataset
Name	Tabular dataset

Metadata linkage	https://sdi.eea.europa.eu/catalogue/srv/api/records/23eeb67a-1d04-4d17-b3cb-7fa2eef0daf7?language=all

Date info (Creation)	2025-06-27T13:28:45.65349Z
Date info (Revision)	2026-10-27T14:57:47.100323Z

Metadata standard

Title	ISO 19115-3:2018
Edition	1.0

Overviews

waterBod	waterBod	paramete	paramete	paramete	observedI	observedI	procedure	phenome	paramete	resultEcol	resultNun	resultEQR	resultNori	resultObs	remarks	metadata	metadata	metadata	metadata	metadata	UID
EEEE_15	euSurface	CW	V	HMWB	EEA_121-(	Macroalga	EPI	2013	2013-06--2	2	87	0.713	0.742			http://dis	2020-01-0	derived			12250
EEEE_12	euSurface	CW	VI	Natural	EEA_121-(	Macroalga	EPI	2013	2013-06--2	2	109	0.71	0.74			http://dis	2020-01-0	derived			12251
EEEE_8	euSurface	CW	V	Natural	EEA_121-(	Macroalga	EPI	2013	2013-06--2	2	80	0.536	0.624			http://dis	2020-01-0	derived			12252
EEEE_13	euSurface	CW	II	Natural	EEA_121-(	Macroalga	EPI	2013	2013-06--2	3	77	0.371	0.471			http://dis	2020-01-0	derived			12253
EEEE_5	euSurface	CW	III	Natural	EEA_121-(	Macroalga	Other	2013	2013-06--2	3	104	0.559	0.493		Other - EP	http://dis	2020-01-0	derived			12254
EEEE_1	euSurface	CW	I	Natural	EEA_121-(	Macroalga	Other	2013	2013-06--2	3	87	0.438	0.449		Other - EP	http://dis	2020-01-0	derived			12255
EEEE_15	euSurface	CW	V	HMWB	EEA_13-05	Invertebr	Other	2013	2013-06--2	2	18	0.66	0.707		Other - ZB	http://dis	2020-01-0	derived			12256
EEEE_12	euSurface	CW	VI	Natural	EEA_13-05	Invertebr	Other	2013	2013-06--2	2	9	0.624	0.683		Other - ZB	http://dis	2020-01-0	derived			12257
EEEE_8	euSurface	CW	V	Natural	EEA_13-05	Invertebr	Other	2013	2013-06--2	2	12	0.574	0.649		Other - ZB	http://dis	2020-01-0	derived			12258
EEEE_13	euSurface	CW	II	Natural	EEA_13-05	Invertebr	Other	2013	2013-06--2	2	9	0.593	0.662		Other - ZB	http://dis	2020-01-0	derived			12259
EEEE_5	euSurface	CW	III	Natural	EEA_13-05	Invertebr	Other	2013	2013-06--2	4	9	0.169	0.398		Other - ZK	http://dis	2020-01-0	derived			12260
EEEE_1	euSurface	CW	I	Natural	EEA_13-05	Invertebr	Other	2013	2013-06--2	2	9	0.261	0.628		Other - ZK	http://dis	2020-01-0	derived			12261
EEEE_8	euSurface	CW	V	Natural	EEA_11-08	Phytoplar	Other	2014	2014-06--2	5	42	0.214	0.195		Other - Ph	http://dis	2020-01-0	derived			12262
EEEE_4	euSurface	CW	III	Natural	EEA_11-08	Phytoplar	Other	2014	2014-06--2	2	24	0.705	0.647		Other - Ph	http://dis	2020-01-0	derived			12263
EEEE_5	euSurface	CW	III	Natural	EEA_11-08	Phytoplar	Other	2014	2014-06--2	1	36	0.829	0.81		Other - Ph	http://dis	2020-01-0	derived			12264
EEEE_1	euSurface	CW	I	Natural	EEA_11-08	Phytoplar	Other	2014	2014-06--2	1	42	0.869	0.846		Other - Ph	http://dis	2020-01-0	derived			12265
EEEE_13	euSurface	CW	II	Natural	EEA_11-08	Phytoplar	Other	2014	2014-06--2	3	21	0.574	0.544		Other - Ph	http://dis	2020-01-0	derived			12266
EEEE_3	euSurface	CW	III	Natural	EEA_11-08	Phytoplar	Other	2014	2014-06--2	2	36	0.734	0.685		Other - Ph	http://dis	2020-01-0	derived			12267
EEEE_8	euSurface	CW	V	Natural	EEA_121-(	Macroalga	EPI	2014	2014-06--2	3	72	0.477	0.577			http://dis	2020-01-0	derived			12268
EEEE_4	euSurface	CW	III	Natural	EEA_121-(	Macroalga	Other	2014	2014-06--2	3	75	0.692	0.54		Other - EP	http://dis	2020-01-0	derived			12269
EEEE_5	euSurface	CW	III	Natural	EEA_121-(	Macroalga	Other	2014	2014-06--2	3	93	0.621	0.515		Other - EP	http://dis	2020-01-0	derived			12270
EEEE_1	euSurface	CW	I	Natural	EEA_121-(	Macroalga	Other	2014	2014-06--2	3	77	0.337	0.413		Other - EP	http://dis	2020-01-0	derived			12271
EEEE_13	euSurface	CW	II	Natural	EEA_121-(	Macroalga	EPI	2014	2014-06--2	3	72	0.392	0.492			http://dis	2020-01-0	derived			12272
EEEE_3	euSurface	CW	III	Natural	EEA_121-(	Macroalga	Other	2014	2014-06--2	3	71	0.846	0.595		Other - EP	http://dis	2020-01-0	derived			12273
EEEE_8	euSurface	CW	V	Natural	EEA_13-05	Invertebr	Other	2014	2014-06--2	2	9	0.595	0.663		Other - ZB	http://dis	2020-01-0	derived			12274
EEEE_4	euSurface	CW	III	Natural	EEA_13-05	Invertebr	Other	2014	2014-06--2	3	9	0.211	0.517		Other - ZK	http://dis	2020-01-0	derived			12275
EEEE_5	euSurface	CW	III	Natural	EEA_13-05	Invertebr	Other	2014	2014-06--2	4	11	0.144	0.342		Other - ZK	http://dis	2020-01-0	derived			12276
EEEE_1	euSurface	CW	I	Natural	EEA_13-05	Invertebr	Other	2014	2014-06--2	3	9	0.188	0.451		Other - ZK	http://dis	2020-01-0	derived			12277
EEEE_13	euSurface	CW	II	Natural	EEA_13-05	Invertebr	Other	2014	2014-06--2	2	9	0.54	0.627		Other - ZB	http://dis	2020-01-0	derived			12278
EEEE_3	euSurface	CW	III	Natural	EEA_13-05	Invertebr	Other	2014	2014-06--2	1	9	0.579	0.862		Other - ZK	http://dis	2020-01-0	derived			12279
EEEE_5	euSurface	CW	III	Natural	EEA_11-08	Phytoplar	Other	2015	2015-06--2	3	42	0.332	0.401		Other - Ph	http://dis	2020-01-0	derived			12280
EEEE_1	euSurface	CW	I	Natural	EEA_11-08	Phytoplar	Other	2015	2015-06--2	3	42	0.479	0.488		Other - Ph	http://dis	2020-01-0	derived			12281
EEEE_13	euSurface	CW	II	Natural	EEA_11-08	Phytoplar	Other	2015	2015-06--2	3	21	0.515	0.509		Other - Ph	http://dis	2020-01-0	derived			12282
EEEE_16	euSurface	CW	V	Natural	EEA_11-08	Phytoplar	Other	2015	2015-06--2	3	36	0.595	0.556		Other - Ph	http://dis	2020-01-0	derived			12283
EEEE_8	euSurface	CW	V	Natural	EEA_11-08	Phytoplar	Other	2015	2015-06--2	4	36	0.328	0.396		Other - Ph	http://dis	2020-01-0	derived			12284
EEEE_9	euSurface	CW	V	Natural	EEA_11-08	Phytoplar	Other	2015	2015-06--2	3	36	0.517	0.51		Other - Ph	http://dis	2020-01-0	derived			12285

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