EEA geospatial data catalogue

Phosphate in rivers (2007-2023)

This indicator shows concentrations of phosphate in rivers over time.

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)	2026-01-14
Date (Publication)	2026-01-14
Date (Revision)	2026-01-19
Edition	01.00
Citation identifier	eea_s_eu-sdg-06-50_p_2007-2023_v01_r00

Identifier

Code	10.2909/82df5e8b-a09e-4d45-9446-f03c5b8508b1
Codespace	doi.org
Description	Digital Object Identifier (DOI)

Point of contact

Organisation	Individual	Electronic mail address	Website	Role
European Environment Agency		sdi@eea.europa.eu	http://www.eea.europa.eu	Point of contact
European Environment Agency		sdi@eea.europa.eu		Custodian

Topic category

- Environment
- Inland waters

Extent

Temporal extent

Time period	2007-01-01 2023-12-31
Maintenance and update frequency	Annually
Date	2026-10
Date type	Next Update
GEMET	in situ organic pollution

	• sustainable development goals • phosphate • river • statistical data
Continents, countries, sea regions of the world.	• Iceland • Czechia • Norway • Slovenia • Lithuania • North Macedonia • Bulgaria • Latvia • Italy • Croatia • Ireland • Belgium • Denmark • Switzerland • Finland • Slovakia • Romania • Spain • Estonia • Serbia • Sweden • Albania
Reporting obligations	• WISE SoE - Water quality (WISE-6)
EEA Management Plan	• 2025 EEA/INDI/2025/061
EEA topics	• Sustainability challenges • Water • Pollution
Unit of measure	• mg PO4 per litre
Available breakdowns	• Country
Reference period	• Calendar year

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).
Language	English

Distribution Information

Distribution format	• Microsoft Excel (.xls, .xlsx) • ascii (.csv, .txt, .sql)
OnLine resource	Direct download
OnLine resource	EEA Indicator WAT003 - Nutrients in freshwater in Europe
OnLine resource	Eurostat indicator: Phosphate in rivers
OnLine resource	Product Information & Technical Documentation
OnLine resource	Digital Object Identifier (DOI)

Data quality info

Hierarchy level	Dataset

Report

Name of measure	Frequency of dissemination
Measure description	Indicator is updated annually.

Result

Value	Every year

Report

Name of measure	Timeliness
Measure description	New data points are disseminated within two years after the reference year.

Result

Value	T+2 years

Report

Name of measure	Reference area
Measure description	Data are presented for all EU Member States except for Greece, Croatia, Luxembourg, Hungary, Malta.

Result

Value	> 75% EU MS and EU aggregate

Report

Name of measure	Comparability - geographical
Measure description	Data comparability between EU Member States respectively other presented countries is limited due to monitoring programs, including methodology and spatio-temporal sampling density, varying from country to country. The reporting is voluntary so countries do not necessarily report all available data.

Result

Value	> 75% EU MS

Report

Name of measure	Time coverage
Measure description	Presented time series (aggregate changing according to the context EU_V) starts in 2007.

Result

Value	> 10 years

Report

Name of measure	Comparability - over time
Measure description	Length of comparable time series without methodological break is longer than 4 data points. Only complete series after GAMs processing are presented. A major revision has been performed since the 2024 version.

Result

Value	> 4 data points

Resource lineage

Statement	The time series on phosphate in rivers is considered robust for long-term trends due to extensive quality control and consistent methodology using generalized additive models (GAM) for data gap-filling. Precision is impacted by variations in national data reporting and water body delineation (spatial data). The time series are based on data collection methods and aggregation techniques, which include using annual averages that may not capture extreme events, varying sampling frequencies, data set gaps filled by inter /extrapolation, and changes in monitoring sites requiring recalculation. Methodology documentation: https://water.europa.eu/freshwater/europe-freshwater/nutrients/documentation
Hierarchy level	Dataset
Source	• Waterbase - Water Quality ICM

Metadata

Metadata identifier	82df5e8b-a09e-4d45-9446-f03c5b8508b1
Language	English
Character encoding	UTF8

Contact

Organisation	Individual	Electronic mail address	Website	Role
European Environment Agency		sdi@eea.europa.eu		Point of contact

Type of resource

Resource type	Non geographic dataset
Name	Tabular dataset

Metadata linkage	https://doi.org/10.2909/82df5e8b-a09e-4d45-9446-f03c5b8508b1
Date info (Creation)	2026-01-14T14:47:50.49818Z
Date info (Revision)	2026-10-27T15:20:41.493223Z

Metadata standard

Title	ISO 19115/19139
Edition	1.0

Overviews

Dataset for indicator:	Phosphate in rivers (2007-2023)
Code:	06_50
Dimension:	PO4_MG_L
Dimension (Label):	Phosphate in rivers
Unit:	MG_L
Unit (Label):	mg PO4 per litre

GEO (Labels)	GEO (Codes)	2007	Flags	2008	Flags	2009	Flags	2010	Flags	2011	Flags	2012	Flags	2013	Flags	2014	Flags	2015	Flags	2016	Flags	2017	Flags	2018	Flags	2019	Flags	2020	Flags	2021	Flags	2022	Flags	2023	Flags
European Union (aggregate changing according to the context)	**EU_V**	**19.35**		**19.2**		**19.08**		**18.97**		**18.87**		**18.82**		**18.8**		**18.79**		**18.78**		**18.75**		**18.7**		**18.65**		**18.58**		**18.49**		**18.35**		**18.19**		**18.14**	
Belgium	BE	32.61		32.98		32.99		32.67		32.15		31.57		31.05		30.65		30.41		30.33		30.36		30.43		30.48		30.46		30.34		30.15		29.96	
Bulgaria	BG	23.84		23.75		23.7		23.85		24.28		24.79		25.29		25.74		26.19		26.65		27.1		27.5		27.82		28.08		28.35		28.7		29.18	
Czechia	CZ	20.62		20.32		20.3		20.25		20.34		20.56		20.84		21.05		21.01		20.67		20.22		19.82		19.52		19.38		19.42		19.6		19.6	
Denmark	DK	23.39		22.96		22.61		22.39		22.29		22.31		22.44		22.66		22.93		23.22		23.49		23.7		23.85		23.91		23.92		23.91		23.89	
Germany	DE	24.23		24.26		24.31		24.26		24.12		23.94		23.76		23.57		23.38		23.2		23.02		22.85		22.7		22.5		22.31		22.23		22.19	
Estonia	EE	7.43		7.51		7.56		7.57		7.6		7.6		7.52		7.37		7.19		7.02		6.89		6.81		6.77		6.78		6.81		6.9		7	
Ireland	IE	13.12		12.72		12.37		12.06		11.92		11.85		11.78		11.69		11.63		11.65		11.75		11.91		12.09		12.27		12.42		12.54		12.69	
Greece	EL	:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:	
Spain	ES	38.55		37.98		37.32		36.67		36.1		35.62		35.23		34.93		34.69		34.5		34.32		34.12		33.87		33.45		32.88		32.26		31.74	
France	FR	17.85		17.76		17.7		17.64		17.56		17.49		17.43		17.38		17.33		17.29		17.27		17.26		17.28		17.33		17.38		17.42		17.49	
Croatia	HR	:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:	
Italy	IT	23.59		23.29		23.18		23.02		22.67		22.39		22.07		21.56		20.87		20.19		19.74		19.62		19.99		20.61		20.49		19.53		18.8	
Cyprus	CY	28.81		29.09		29.14		30.33		33.22		38.61		46.88		57.4		67.46		71.19		63.32		46.65		30.3		19.31		19.31		19.31		19.31	
Latvia	LV	1.28		1.6		2.04		2.63		3.33		4.04		4.52		4.5		4		3.28		2.61		2.11		1.79		1.63		1.59		1.66		1.82	
Lithuania	LT	7.31		5.78		4.92		4.39		4.07		3.89		3.84		3.92		4.12		4.44		4.86		5.32		5.71		5.9		5.89		5.79		5.74	
Luxembourg	LU	:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:	
Hungary	HU	:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:	
Malta	MT	:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:	
Netherlands	NL	7.77		7.68		7.75		8		8.48		9.24		10.27		11.44		12.47		13.03		12.9		12.11		10.89		9.55		8.34		8.34		8.34	
Austria	AT	26.12		26.14		26.12		26.05		25.92		25.54		25.1		24.6		24.05		23.47		22.9		22.37		21.91		21.53		21.25		21.05		20.91	
Poland	PL	8.81		8.88		8.79		8.78		8.91		9.24		9.75		10.46		11.31		12.17		12.83		13.06		12.63		11.56		10.26		9.1		8.59	
Portugal	PT	17.65		17.21		16.82		16.46		16.13		15.83		15.54		15.29		15.07		14.93		14.87		14.89		14.98		15.12		15.28		15.46		15.7	
Romania	RO	13.79		13.57		13.45		13.4		13.38		13.39		13.47		13.63		13.81		13.9		13.89		13.9		13.99		14.19		14.51		14.94		15.51	
Slovenia	SI	15.13		14.94		14.77		14.62		14.5		14.42		14.37		14.35		14.37		14.43		14.51		14.63		14.77		14.92		15.1		15.28		15.48	
Slovakia	SK	16.11		16.34		16.53		16.54		16.33		16.01		15.7		15.49		15.37		15.36		15.44		15.61		15.79		15.9		15.91		15.93		16.09	
Finland	FI	7.59		7.59		7.6		7.6		7		6.4		5.86		5.47		5.24		5.11		5.02		4.9		4.77		4.7		4.88		4.88		4.88	
Sweden	SE	3.03		3.02		3.01		3		3.03		3.02		2.92		2.76		2.59		2.48		2.46		2.53		2.69		2.83		2.75		2.56		2.4	
Iceland	IS	:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:	
Liechtenstein	LI	:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:	
Norway	NO	:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:	
Switzerland	CH	15.97		15.93		15.87		15.78		15.66		15.48		15.26		15.02		14.78		14.55		14.37		14.24		14.17		14.16		14.2		14.29		14.42	
Bosnia and Herzegovina	BA	:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:	
Montenegro	ME	:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:	
North Macedonia	MK	:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:	
Albania	AL	:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:	
Serbia	RS	4.05		4		3.98		4.06		4.29		4.76		5.45		6.26		7.09		8.09		9.5		10.92		11.33		10.63		9.79		9.3		9.12	
Türkiye	TR	:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:	
Kosovo (under United Nations Security Council Resolution 1244/99)	XK	:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:		:	

Flags and special values (2025)		
special values	:	not available
Flags	b	break in time series
	e	estimated
	p	provisional
	m	missing value; data cannot exist

Provided by

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