

European waters getting cleaner, but big challenges remain



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European waters getting cleaner, but big challenges remain

Despite progress in improving the quality of Europe's lakes, rivers, coastal waters and groundwater sources, pollution, structures like dams, and over-abstraction remain top threats to their long-term health. A vast majority of Europe's water bodies still fail to meet the European Union's minimum target for 'good status', according to a European Environment Agency 'state of water' report published today.

“

We must increase efforts to ensure our waters are as clean and resilient as they should be — our own well-being and the health of our vital water and marine ecosystems depend on it. This is critical to the long-term sustainability of our waters and in meeting our long-term goals of living well within the limits of our planet.

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Hans Bruyninckx, EEA Executive Director

EU Member States have made marked efforts to improve water quality, by improving wastewater treatment and lowering the runoff of pollutants from farmland, according to the EEA report 'European waters — assessment of status and pressures 2018'. Measures have also been taken to make barriers passable to migrating fish and restore degraded aquatic ecosystems.

While Europe's ground water bodies, like aquifers, are in good health in most cases, only 40% of monitored lakes, rivers, estuaries and coastal waters achieved the the EU Water Framework Directive's minimum 'good' or 'high' ecological status during the 2010-2015 monitoring period, according to the report. The last EEA assessment in 2012 found a similar level of water bodies meeting 'good' or 'high' ecological status. The EEA assessment also looked at the quantitative state and over-abstraction of Europe's groundwater and the overall chemical status of water bodies.

The EEA report gives an updated health check on over 130,000 surface and groundwater bodies monitored by EU Member States, based on the data collected and reported from more than 160 so-called River Basin Management Plans covering the period 2010 to 2015.

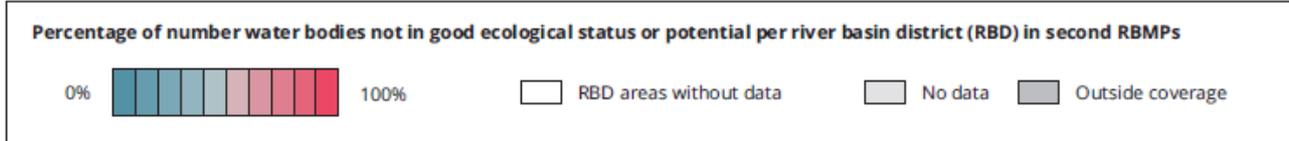
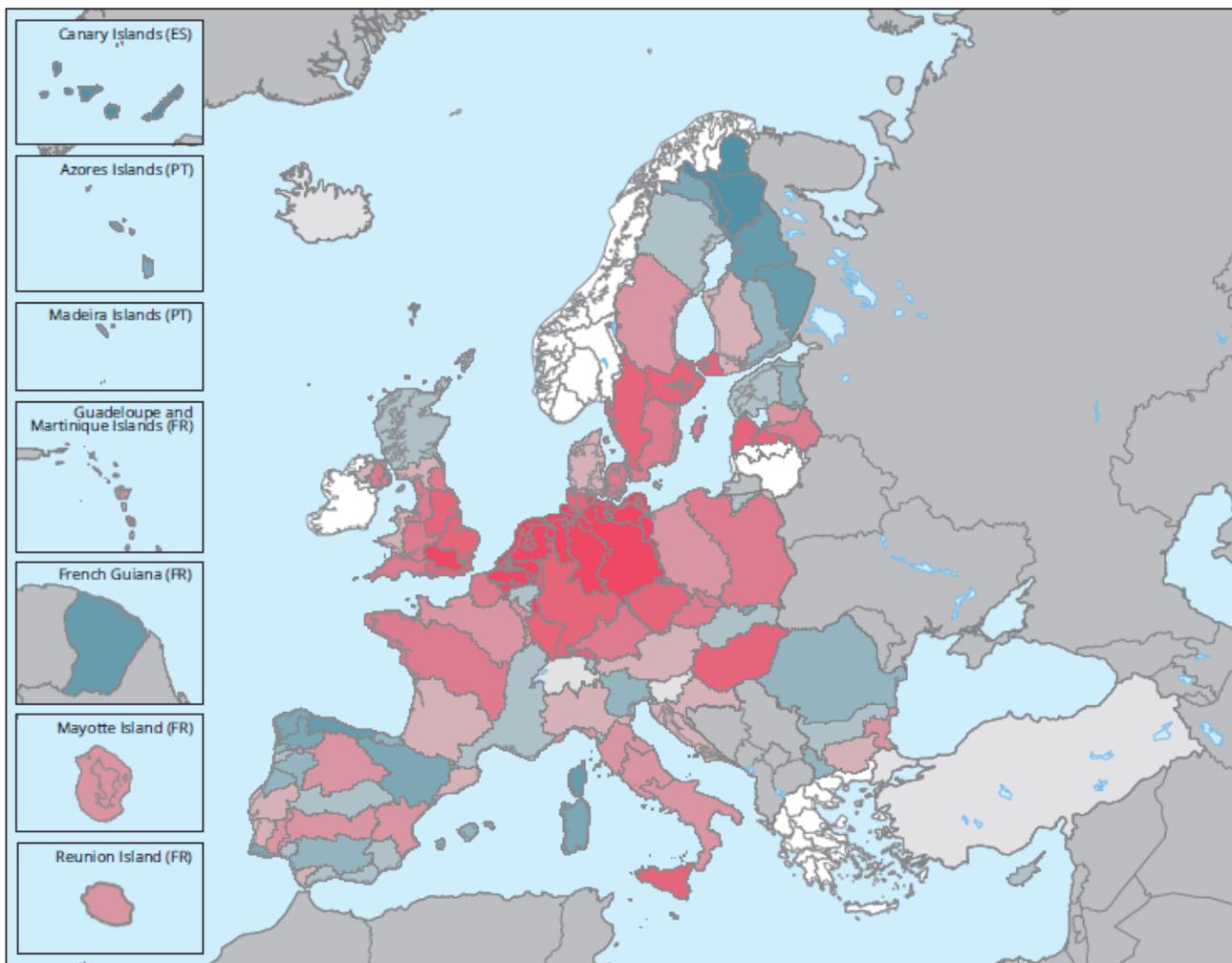
'Thanks to the implementation of European water legislation in the Member States, the quality of Europe's freshwater is gradually improving, but much more needs to be done before all lakes, rivers, coastal waters and groundwater bodies are in good status. Tackling pollution from

agriculture, industry and households requires joint efforts from all water users throughout Europe,' said Karmenu Vella, EU Commissioner for Environment, Maritime Affairs and Fisheries.

'We must increase efforts to ensure our waters are as clean and resilient as they should be — our own well-being and the health of our vital water and marine ecosystems depend on it. This is critical to the long-term sustainability of our waters and in meeting our long-term goals of living well within the limits of our planet,' said Hans Bruyninckx, EEA Executive Director.

The EEA water assessment is the second since 2012. Knowledge of Europe's waters has grown significantly since then, providing a better understanding of the status, the problems that lead to failure in achieving 'good status' and the measures implemented to generate improvement. The EEA report complements a forthcoming European Commission report, which will assess to what extent the Member States comply with the Water Framework Directive. This Directive sets out a framework on how to assess, manage, protect and improve water quality across the EU. It requires Member States to produce River Basin Management Plans (RBMPs) as well as a Programme of Measures to improve water quality.

Percentage of surface water bodies in less than good ecological status by River Basin Districts



Source: Results are based on WISE-SoW database including data from 24 Member States (EU-28 except Greece, Ireland, Lithuania and Slovenia). Water bodies failing to achieve good status, by RBD; see also [Surface water bodies: Ecological status or potential \(group\)](#) and [Surface water bodies failing to achieve good status by RBD](#).

Note: Percentage based on known ecological status or potential (without unknown status). Caution is needed when comparing results between Member States, as the results can be significantly affected by the methodology applied by individual Member States.

Other key findings

- Compared to surface waters, groundwater sources generally have the best status. Good chemical status has been achieved for 74% of the groundwater area, while 89 % of the area achieved good quantitative status. The reasons for not meeting the minimum targets were mostly due to contamination of water sites by nitrates from agricultural run-off, salt intrusion, and the seeping of hazardous chemicals from contaminated sites (e.g. industrial sites, mining areas or waste storage).
- Northern Scandinavia, northern United Kingdom (Scotland) and Estonia, as well as Slovakia, Romania, and several river basin districts in the Mediterranean region show a high proportion of surface water bodies in high or good ecological status. In contrast, many of the central European river basin districts, with higher population density and more intensive agriculture, show the highest proportion of water bodies failing to achieve good ecological status.
- Only 38% of monitored lakes, rivers and other surface water bodies are in good chemical status — with concentrations of pollutants not exceeding environmental quality EU-wide standards.
- In most Member States, a few substances account for poor chemical status, the most common being mercury. Once widely used in thermometers, batteries, and paints, mercury continues to be found in water samples, followed by cadmium, which is used in phosphate fertilisers and in metal production.
- The Water Framework Directive and RBMPs have significantly improved water management across the EU. Many Member States have invested in better ecological and chemical monitoring programmes, with more monitoring sites, more quality elements assessed and more chemicals analysed. This has led to increased availability of information and provides a much better understanding of status and pressures. The Water Framework Directive has also generated a substantial effort across EU Member States to reduce sources of pollution from agriculture, industry and households, as well as in a more natural flow of rivers and the removal of obstacles to fish migration, generating benefits for nature and protection against floods.

EU water quality target

Achieving good status involves meeting certain standards for the ecology, chemistry and quantity of waters. Ecological status is the best overall indicator of how healthy a body of water is. It takes into account how pollution, habitat degradation, climate change, and other pressures like the number of man-made dams impact the quality of the water.

The top pressures responsible hindering progress in meeting the EU targets include barriers like dams, land reclamation, and channelization, which change the flow of rivers or streams; diffuse source pollution like farm run-off; and point source pollution such as waste water discharge from sewers. The main impacts on surface water bodies are nutrient enrichment, chemical pollution and altered habitats due to morphological changes.

Monitoring and reporting are the main tools used to classify the health of EU waters. EU Member States define the status based on a scale from high, good, and moderate to poor and bad status for surface waters and two classes, good or poor, for groundwater. Monitoring is meant to track the effectiveness of measures to clean up water bodies and achieve the EU's 'good status' target.

EU Member States are currently in their second monitoring and reporting cycle (2015-2021) under the EU Water Framework Directive. This round includes 89,000 rivers, 18,000 lakes, 13,000 groundwater sites, and 3,600 coastal and estuary waters. Reporting from Greece, Ireland, Lithuania and from parts of Spain could not be included in the report.

Related content

Data visualisations

Groundwater quantitative and chemical status [<https://www.eea.europa.eu/themes/water/water-assessments/groundwater-quantitative-and-chemical-status>]

Ecological status of surface water bodies [<https://www.eea.europa.eu/themes/water/water-assessments/ecological-status-of-surface-water-bodies>]

Chemical status of surface water bodies [<https://www.eea.europa.eu/themes/water/water-assessments/chemical-status-of-surface-water-bodies>]

Delineation of water bodies [<https://www.eea.europa.eu/themes/water/water-assessments/delineation-of-water-bodies>]

Pressures and impacts [<https://www.eea.europa.eu/themes/water/water-assessments/pressures-and-impacts-of-water-bodies>]

Quality element status [<https://www.eea.europa.eu/themes/water/water-assessments/quality-elements-of-water-bodies>]

Distribution of ecological status or potential of classified rivers, lakes, coastal and transitional

waters, by count of water bodies [<https://www.eea.europa.eu/data-and-maps/daviz/distribution-of-ecological-status-or-3>]

Related data

WISE WFD Database [<https://www.eea.europa.eu/data-and-maps/data/wise-wfd-1>]

Related publications

European waters -- Assessment of status and pressures 2018

[<https://www.eea.europa.eu/publications/state-of-water>]

See also

EEA 2018 water assessment [<https://www.eea.europa.eu/themes/water/water-assessments/eea-2018-water-assessment>]

Supporting figures

Percentage of area of groundwater bodies not in good quantitative status per river basin district [<https://www.eea.europa.eu/data-and-maps/figures/percent-of-groundwater-bodies-in-1>]

Percentage of water bodies not in good ecological status/potential in Europe's river basin districts in second RBMPs [<https://www.eea.europa.eu/data-and-maps/figures/proportion-of-classified-surface-water-5>]

Temporal coverage

2000-2015

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