

Water management in Europe faces rising challenges as ecosystems weaken

Water pollution and excessive water use are still harming ecosystems, which are indispensable to Europe's food, energy, and water supplies. To maintain water ecosystems, farming, planning, energy and transport sectors need to actively engage in managing water within sustainable limits.



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Jacqueline McGlade, EEA Executive Director

'European waters – current status and future challenges' brings together findings from nine other European Environment Agency (EEA) reports published during the course of 2012 and early 2013. The report shows a mixed picture for the status of Europe's water bodies, while the findings are worrying when it comes to ecosystems' ability to deliver essential services.

Strong ecosystems should be maintained, partly because they provide vital services which are

often overlooked, the report says. For example, restoring a wetland is not only good for biodiversity but also water filtration, water retention and flood prevention. Although essential, these services are not accounted for in current financial and economic systems.

“Water is finite, and cannot continue to absorb limitless amounts of pollution without damaging the resources and ecosystems we rely on,” Jacqueline McGlade, EEA Executive Director, said. “Farmers, planners and companies need to cooperate more, to make sure that the combined pressures on ecosystems do not pass harmful limits.”

- **Ecosystems are under pressure.** Less than half (48 %) of Europe's surface water bodies are likely to be in good ecological status by 2015, as specified by the Water Framework Directive (WFD). To meet this target, water bodies must further reduce nutrient pollution and restore more natural features. The effects of these problems are clear – 63 % of lakes and river habitats in the EU are reported to have an ‘unfavourable’ conservation status.

- **Modification of water bodies is harming ecosystems.** The extent of modification of water bodies – the ‘hydromorphological status’ – is also a problem in 52 % of surface waters. Artificial modifications such as dams or reservoirs can prevent plants and animals from migrating or reproducing.

- **Pollution problems in European waters.** Nitrate pollution from agricultural fertilisers is the most long-term pollution problem for European surface waters. At the current rate of improvement, nitrate levels will still be too high for several decades to come, the report notes. Phosphates and ammonia pollution are reducing more quickly, due to better waste water treatment. This improvement is visible in the improving water quality at bathing sites across Europe – in 2011, 92.1 % of sites met the minimum standards.

- **Agriculture and other sectors are using water inefficiently.** Water scarcity is caused by human demands exceeding the available freshwater resources, adding to the ‘water deficit’ during summer droughts in many parts of Europe.

- **Drought is increasing across Europe.** The number of countries affected by drought per decade increased from 15 in the period 1971–1980 to 28 in the period 2001–2011. Climate change is expected to exacerbate this problem.

- **Flooding is becoming more frequent, especially in Northern Europe.** More than 325 major river floods have been reported in Europe since 1980, of which more than 200 have been reported since 2000. This is partly caused by increased building in flood prone areas. Projected climate change is expected to lead to more floods in many areas.

Looking ahead to responsive water resources management

Solutions to many of Europe's water problems have been analysed in the European Commission's [Water Blueprint](#), published in 2012. The EEA report, launched today at the Blueprint conference in Cyprus, underpins the Blueprint's recommendations and provides a baseline for monitoring progress.

New incentives can help Europe reduce the amount of water that is wasted, according to the EEA report. Suggested measures include reconsidering pricing structures for water use or domestic metering. However, incentives introduced with other policy objectives in mind can also encourage wasteful behaviour, for example some governments subsidise water use or encourage water-intensive crops in dry areas.

Farming remains one of the largest pressures on Europe's water resources, so agriculture and the food industry are major actors in significantly improving the situation. In the future, payments to farmers under the Common Agricultural Policy should consider their overall effect on water resources, the report says.

Energy production is another sector with a high impact on water in Europe. Biofuel production can be water intensive, while hydropower plants often divert water used for other sources. Extracting non-conventional oil and gas resources can also lead to water pollution. Careful planning can balance these demands against the needs of ecosystems, the report says.

Overall, river basins need to be further managed with constructive dialogue between the many stakeholders in the area. Public participation and the development of a strong knowledge base are paramount to engage into this dialogue.

The report states that the river basin is the best geographical scale for making accurate 'water accounts' – in effect asset management to balance the incoming and outgoing resources. Upcoming challenges for water resource management can only be met when water managers have the right information at their fingertips.

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<http://www.eea.europa.eu/pressroom/newsreleases/water-management-in-europe-faces>