

Opinion of the European Committee of the Regions — Effective water management system: an approach to innovative solutions

(2017/C 207/09)

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POLICY RECOMMENDATIONS

THE EUROPEAN COMMITTEE OF THE REGIONS

General comments

1. notes that clean and sufficient water, as the source of life, is essential for our health and well-being. Water offers many opportunities for development; however, it also constitutes a threat. Floods, droughts and poor water quality pose a threat to our lives, our health and our prosperity;
2. praises the European Commission for introducing the Water Framework Directive in 2000 which, complemented by more specific Community legislation ⁽¹⁾, streamlined a large portion of the existing legislation, regulated a river basin approach to water management and introduced ambitious long-term water management objectives;
3. is aware that the European Commission is working on the following elements of European water policy:
 - a) The review of the Water Framework Directive (2000/60/EC) in 2019: the European Parliamentary Research Service has carried out an analysis entitled 'Water Legislation — Cost of Non-Europe Report' which sets out a list of implementation problems;
 - b) Measures, including a proposal for a legislative instrument to develop water reuse: water reuse is a key component of the EU eco-industrial landscape. The initiative to promote water reuse is a key factor in the circular economy action plan. This also requires a legislative proposal on minimum quality requirements for reused water, e.g. for irrigation and groundwater recharge;
 - c) The upcoming revision of the Drinking Water Directive (98/83/EC) (DWD) in 2017: the consultations and preparatory studies have highlighted the need to improve EU drinking water policy with respect to the enforcement of the human right to water and sanitation;
 - d) The possible revision of the Urban Waste Water Treatment Directive (91/271/EEC) (UWWTD).
4. draws attention to the fact that in most Member States local and regional authorities have institutional and political responsibilities and competences relating to water management and thereby shape the implementation of most EU water directives. Local and regional authorities are also usually responsible for policy areas that are relevant to sustainable water management, including spatial planning, infrastructure, mobility policy, licensing, agriculture and landscape management, the supply of water, surface and ground water protection, adaptation to climate change and flood protection;
5. takes note of the conclusions of the Council of 17 October 2016 on sustainable water management. The Committee supports the Council's conclusions that water is a top priority and agrees with the recognition that tasks relating to water differ between Member States and that, therefore, there is a need for flexibility in the choice of measures, which include the need to put in place infrastructure to regulate water resources in order to achieve a good status of the environment and water bodies and meet demand;

⁽¹⁾ The Groundwater Directive (2006), the Environmental Quality Standards Directive (2008), the Urban Wastewater Directive (1991), the Nitrates Directive (1991), the new Bathing Water Directive (2006), the Drinking Water Directive (1998), the Floods Directive (2007), the Marine Strategy Framework Directive (2008), and two Commission Decisions (2005 and 2008) on ecological status.

6. points therefore to the importance of respecting the subsidiarity and proportionality principles. The national, regional and local context is pivotal, for example, in water reuse and efficiency improvement measures on the demand side (water efficiency), since the degree of water availability varies. It is therefore important to provide scope for examining such issues at national, regional and local level, within a European framework, and for taking the necessary measures at those levels;
7. acknowledges the very ambitious, voluntary 'Urban Water Agenda 2030' set up by the Leeuwarden Cites and Water Conference in February 2016, and encourages cities in Europe to sign up to it;
8. supports the European Commission's intention to put forward, in 2017 — as part of the implementation of the Action Plan for the Circular Economy — a proposal for minimum requirements regarding the reuse of water and a (REFIT) review of the Drinking Water Directive ⁽²⁾, ensuring that there are no disproportionate negative effects on other sectors, such as agriculture;
9. stresses that differences between regions in terms of water availability must be taken into account. There should be no obligation to reuse water unless this can be justified. Essentially, water reuse is able to offer solutions in regions where water availability poses problems;
10. in this context calls on the European Commission to ensure, as part of a balanced and coherent approach, that water reuse is only employed as an additional water supply option and in parallel with improvements in efficiency on the demand side, and that the possible impacts of reduced availability of water have to be analysed and taken into account;
11. deems it essential that local and regional authorities put forward recommendations through this own-initiative opinion for improving the implementation of EU water legislation, and that they continue to be closely involved in future European water policy;

Background and scope of the opinion

12. has already adopted a position on issues related to water management on several occasions. This own-initiative opinion is a follow-up to the previous CoR opinions such as:
 - a) Opinion on the 'Proposal for a Directive of the European Parliament and of the Council amending Directives 2000/60/EC and 2008/105/EC as regards priority substances in the field of water policy', CdR 1120/2012 ⁽³⁾;
 - b) Opinion on the '7th Environment Action Programme', CdR 593/2013 ⁽⁴⁾;
 - c) Opinion on 'The award of concession contracts', CdR 100/2012 ⁽⁵⁾;
 - d) Opinion on 'The role of regional and local authorities in promoting sustainable water management', CdR 5/2011 ⁽⁶⁾;
13. underlines with respect to the effects of climate change on water management, the need to ensure the coherence and consistency of EU, national, regional and local policy measures with those in the context of the EU's strategy for adaptation to climate change, and refers in this connection to the opinion on 'Towards a new EU climate change adaptation strategy — taking an integrated approach', CdR 2430/2016;
14. acknowledges the breadth of the policy area of water and considers that this own-initiative opinion focuses on domestic water management, i.e. water quality, the shortage of fresh water and flood defences. Sea and ocean water management, and therefore the Marine Strategy Framework Directive and the Directive on maritime spatial planning, as dealt with by previous CoR opinions are not taken into consideration in this opinion;

The importance of good water management

15. draws attention to the major challenges we are facing in the area of water management as a result of climate change and the further intensification of land-use:

⁽²⁾ Commission Work Programme 2017, COM(2016) 710 final, Annex I.

⁽³⁾ OJ C 17, 19.1.2013, p. 91.

⁽⁴⁾ OJ C 218, 30.7.2013, p. 53.

⁽⁵⁾ OJ C 277, 13.9.2012, p. 74.

⁽⁶⁾ OJ C 259, 2.9.2011, p. 13.

- a) In the short term, the growing variability of rainfall patterns increases the risk of flooding and drought. The increase in water temperature and the variation in extreme phenomena, including flooding and drought, affect water quality; similarly, changes in the quantity and quality of water affect its availability, stability and accessibility and impact on the functioning and use of existing infrastructure, as well as management practices;
- b) In the medium term, the challenge is to successfully meet the desired water quality objectives;
- c) The main challenges in the longer term are the impact of rising sea levels and the scarcity of (fresh) water, which has major socioeconomic consequences, such as migration from areas that will be flooded by the sea and/or where fresh water is no longer available due to scarcity; the projected changes in rainfall and temperature are also likely to affect the frequency of flooding, with major socioeconomic and health-related consequences;

16. draws attention to the major economic value of the water sector and the economic importance of good water management. Examples include:

- a) The global supply, treatment and distribution of water is a critical enabler of our society: it guarantees our food, sanitation, health and well-being. Around EUR 63 trillion of the total global economy — worth approximately EUR 70 trillion — is directly dependent on water ⁽⁷⁾;
- b) A recent UN report estimates that 1 billion jobs worldwide — equivalent to 40 % of the total number of jobs — are highly dependent on water and a further 1 billion jobs are partly dependent on water. This means that 80 % of jobs worldwide are water-dependent ⁽⁸⁾;
- c) The European water sector consists of 9 000 active small and medium-sized enterprises and provides 600 000 jobs in utilities alone ⁽⁹⁾;
- d) The total estimated gross value added (GVA) of the industry covering sanitation and water supply services reached EUR 44 billion in 2010 and represented about 500 000 jobs that year ⁽¹⁰⁾;
- e) Over the last 15 years, floods have led to at least EUR 25 billion worth of insured damage, not including uninsured costs. In 2014 alone, the estimated damage amounted to almost EUR 5 billion. According to projections, total annual damage will be five times greater in 2050 ⁽¹¹⁾;

The need for a different type of policy

17. believes that, as there is still so much uncertainty regarding the extent and impact of future water problems and the legislative framework is also variable, developing policy based on a blueprint could be considered a good starting point for improving the links between the various institutions and exploring new innovative approaches to policy-making that enable cooperation between the various sectors by seeking synergies and avoiding conflicts. It is necessary to implement what is known as 'adaptive policy'. The table below provides a recap of the different possibilities:

		Standards and values	
		common	variable
Knowledge	consensus	Planned policy	Negotiations on standards
	controversy	Negotiations on knowledge	Adaptive policies

⁽⁷⁾ WssTP Water Vision 2030 'The Value of Water: Towards a Future proof model for a European water-smart society', October 2016. <http://wsstp.eu/publications/>

⁽⁸⁾ The United Nations World Water Development Report 2016.

⁽⁹⁾ COM(2012) 216 final.

⁽¹⁰⁾ Eurostat (2013) in COM(2014) 363 final.

⁽¹¹⁾ Forzieri, G. et al., 'Multi-hazard assessment in Europe under climate change', *Climatic Change*, Vol. 137, Issue 1, July 2016, pp. 105-119.

18. calls on the European Commission to explore the possibilities for adaptive policy within the area of water policy as part of the upcoming review of the Drinking Water Directive, the measures relating to the use of water, the possible review of the Urban Waste Water Directive and ultimately the review of the Water Framework Directive. This exploration should focus on the most important requirements for adaptive policy, i.e. comprehensiveness, information exchange, flexibility and differentiation in objectives and the efforts to be made, and innovation. When exploring possibilities for a new policy, the Commission should consult with local and regional authorities to ensure any future proposals are in the best interests of local and regional authorities, supporting rather than reducing their competencies;

Comprehensive policy

19. calls on the European Commission to convert its largely sectoral water policy into comprehensive policy and therefore asks the European Commission to ensure that water management is included as a horizontal element in other policy areas that are closely connected with this resource, such as human consumption, energy, agriculture, fisheries, tourism, the environment, etc.;

20. believes that the precautionary and the polluter-pays principles should continue to be used as the starting point in water policy. However, when taking a differentiated approach, all possibilities should remain open with a view to adopting the most effective and efficient solutions, in order to be able to deviate from this starting point in exceptional cases. These solutions will be implemented using innovative, targeted and environmentally sustainable scientific approaches;

21. draws attention, in this connection, to the notion that energy and energy costs can prove to be a major obstacle in implementing innovation and unconventional solutions to water shortages, as well as in transporting water to drought areas or desalination plants and underlines that the use of renewable energy in this context, as well as the potential of water itself as a source of energy, must be taken into account when designing EU policies;

22. draws attention to the increasing use of medicines such as antibiotics, for example, the active ingredients of which find their way into surface water via the sewer system. This creates more work for the sector producing drinking water from surface water, but may also lead to a greater risk of antibiotic resistance. The solution to this problem lies in an approach focusing on the diffuse sources of residual medications: leftover medicines and drug residues in urine and faeces;

23. encourages Member States and local and regional authorities to include in their water policies the concepts of green infrastructure and natural water retention measures (NWRM) in addition or as alternatives to traditional grey structural measures (e.g. to reduce hydro-morphological pressures in river basins), in their operational programmes under ESIF funding (e.g. for the restoration of wetlands and forests), or in urban planning (e.g. for storage of rainwater (for reuse) or to increase water retention to reduce the impact of flooding);

24. draws attention to the need to improve water management by helping protect clean water supplies in times of natural disasters ⁽¹²⁾;

25. encourages local and regional authorities to engage with insurance companies and the national government to ensure that all households, farms and businesses which could be affected by flooding can obtain affordable insurance. Further work is also needed to guarantee that all stakeholders recognise that building resilience at the outset is the most effective way to minimise risks and reduce long-term costs from natural disasters;

Information exchange between policy-makers and those who implement it

26. notes that the objectives of the various policy areas are in themselves acceptable (planned policy), but the necessary measures often conflict when it comes to their implementation. The Committee draws attention to the fact that regions and cities, where implementation takes place, often have to balance these kinds of conflicting measures;

27. asks the European Commission to boost the exchange of information from those who implement water policy, i.e. local and regional authorities, to policy-makers in Brussels and to factor this information, e.g. about conflicting objectives, into its new policy or any adjustments to its policy;

⁽¹²⁾ CdR 2646/2014.

Revision and implementation of existing legislation

28. expects the planned revision of the Drinking Water Directive to improve the monitoring systems and analysis parameters, ensure better access to information on drinking water quality for citizens, address the problem of leakages, develop the regulatory framework for small or individual drinking water supplies, propose solutions to the problems caused by materials in contact with drinking water, and update the existing derogations from the legislation;

29. insists that a future revision of the Urban Waste Water Treatment Directive (UWWTD) should aim in particular at improving the monitoring, reporting and public dissemination of data, and strongly recommends that links to the circular economy and resource efficiency in the EU be taken into account. Member States should have their reporting requirements relaxed at least to the extent of the obligations they have already met;

30. welcomes the European Commission's new approach of assessing 'distance to compliance' focusing on the remaining gaps in the actually correctly collected, connected and treated waste water and complementing the official assessment of compliance with legal obligations arising from the Urban Waste Water Treatment Directive (UWWTD); notes with satisfaction that the European Commission in its 8th implementation report of the UWWTD has for the first time processed and included results at regional level and calls on the European Commission to maintain both the 'distance to compliance' and the regional approaches and further develop them in cooperation with local and regional actors;

31. calls on the European Commission, the Member States and the local and regional authorities to reduce water scarcity and further increase water efficiency, in particular by:

- a) clearly prioritising water demand management, water efficiency in irrigation, buildings and in the energy sector;
- b) tackle over-extraction by the revision of permits or better enforcement in line with the Water Framework Directive;
- c) take action at the earliest possible stage in product policy, including future legislation to increase the water efficiency of devices in the working plans under the Eco-design Directive;
- d) further support water metering across all sectors and users;
- e) address water loss through leakages by encouraging infrastructure investment, financed also through adequate water pricing and appropriate enforcement measures;

Flexibility and differentiation in objectives

32. notes that there is tension between the water quality objectives and the Common Agricultural Policy (CAP) and asks the European Commission to ensure better alignment between these two policy areas. The EU should avoid increasing such conflicts and the related administrative burdens of having to implement potentially conflicting legislation, but rather seek the most efficient, cost-effective and mutually reinforcing compromises;

33. believes it is appropriate and necessary to integrate Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources into the WFD, with a view to standardising measures for obtaining a good status of water bodies and safeguarding the quality of drinking water;

34. asks the European Commission to explore the possibilities for a more flexible, differentiated water policy. Flexibility is necessary due to the uncertainty surrounding future water problems. Water policy — both its objective and approach — will therefore need to find a balance between the necessary legal certainty to allow long-term planning and multiannual, cost-intensive investments on the one hand, and the need to adapt to new circumstances when necessary, on the other. It is therefore necessary to differentiate objectives in terms of time and place in order to boost the effectiveness of measures and increase ownership ⁽¹³⁾, without this leading to more modest ambitions;

⁽¹³⁾ For example, it is much more effective to adopt measures against flooding or to improve water quality in a river basin upstream than further downstream. At the same time, it is clear that downstream regions should contribute to upstream measures.

35. asks the European Commission to develop an alternative to the 'one out = all out' monitoring standard in the WFD. The 'one out = all out' principle does not provide as good a picture of the actual ecological and chemical situation and of the efforts already undertaken to improve water quality. It is necessary to develop a monitoring tool that reflects the results already achieved in the Member States, in order to ensure ownership of the necessary measures among other things;

Research and Innovation

36. is convinced that, alongside innovation in policy, further technical innovations are of the utmost importance in order to face current and future water problems ⁽¹⁴⁾. In order to support this kind of innovation, the Committee stresses the possible benefit of an EU-level European water innovation action agenda towards a sustainable and circular water-smart society. Such a framework would help to encourage Member States and local and regional authorities, with support from the European Commission, to apply systemic innovative approaches and set up or facilitate partnerships in water innovation projects. Although existing knowledge platforms and financing opportunities for innovation are developing, increasing and expanding significantly, the Committee identifies two obstacles hampering the implementation of innovative solutions. The Committee therefore calls on the Commission to:

- a) further reduce the administrative burden involved in accessing European innovation funds through collaboration and investment to prevent major long term challenges to water management across the EU. An important point of concern is the conflicting legislation on state aid and the difficulty businesses experience in accessing innovation funds;
- b) explore the possibility of allowing room for experimentation in situations where restrictions from other policy areas are hampering the implementation of innovative solutions;

Conclusion

37. stresses that water management is a capital-intensive policy area in which major investments are made, and that these investments will only increase further in the future. Adopting a broader scope to defining problems and approaching problem-solving and improving the integration of related policy areas (such as agriculture, energy, health), as already advocated by the existing legislation, reduces the chance of disinvestment and creates new opportunities and a breeding ground for innovation. The challenge lies in making sensible decisions that do justice to what we wish to preserve now, but that also provide sufficient scope for tackling uncertain future challenges, in order to ***manage the source of life!***

Brussels, 9 February 2017.

*The President
of the European Committee of the Regions*
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⁽¹⁴⁾ For example, after secondary purification, waste water is a good source for drinking water production, particularly when compared to desalinisation. The task here, though, is to win public acceptance.