Safe water reuse for farmers, citizens and the environment

Why is there a need for a Regulation on minimum requirements for water reuse?

Today, one third of the EU territory suffers from water stress all year round. Water scarcity is a concern for many EU Member States and according to climate change projections, the problem will increase across Europe in the next decades. Water shortages or contamination can have serious social and economic costs and this may affect competitiveness and the Internal Market. Therefore, as part of an integrated water management approach that includes water savings and water efficiency measures as first priority measures, treated waste water from urban waste water treatment plants provides a reliable alternative water supply for various purposes such as agricultural irrigation. Furthermore, it extends the water life cycle, thereby helping to preserve water resources and in full compliance with the circular economy objectives.

The proposal intends to stimulate and facilitate the uptake of water reuse for agricultural irrigation wherever this is relevant, safe and cost-effective. The proposal also contributes to reinforcing confidence among consumers in the internal market that foodstuff produced with reclaimed water can be trusted by requiring all Member States wishing to engage in reuse practices to abide by the same minimum parameters, so as to secure a level of water quality which avoids any health or environmental risks. At the same time, the proposal will promote the use of greener technologies for water treatment purposes.

What is the Commission proposing and why?

This proposal on water reuse contributes to alleviating water scarcity across the EU, in the context of adaptation to climate change. It concerns agricultural irrigation, with agriculture being an important user of water. The proposal ensures that treated waste water (thereinafter ‘reclaimed water’) intended for agricultural irrigation is safe, thus protecting citizens and the environment. The proposal completes the existing EU legal framework on water and foodstuffs respectively by filling a previously existing gap.

EU intervention on water reuse for agricultural irrigation is justified to prevent that different requirements in individual jurisdictions negatively affect the level playing field and cause obstacles to the internal market, especially for primary agricultural products.

The legal form of the proposal is a Regulation, and it will be directly applicable to business operators (next to Member States), thus stimulating market uptake, potentially even in those Member States that are currently not facing the issue of water scarcity, but where good "green" technologies are being produced. This could have a positive impact on
research and innovation, as well as the emergence of best technologies and new business opportunities in the internal market.

By setting minimum requirements for quality and monitoring of reclaimed water, as well as introducing key risk management tasks, the proposal provides for a harmonised approach to water reuse for irrigation across the EU.

The proposal introduces the following key elements:

1. **Minimum requirements for quality of reclaimed water and monitoring**, covering microbiological elements (for example, levels of E. coli bacteria) and monitoring requirements for routine and validation monitoring. These minimum requirements are based on a JRC technical report that is available at: [http://publications.jrc.ec.europa.eu/repository/bitstream/JRC109291/jrc109291_online_08022018.pdf](http://publications.jrc.ec.europa.eu/repository/bitstream/JRC109291/jrc109291_online_08022018.pdf) They will guarantee that reclaimed water produced in accordance with the proposed Regulation is safe for irrigation.

2. **Key risk management tasks** add an additional layer of protection on top of the minimum requirements, i.e. the identification of any additional hazard that needs to be addressed for water reuse to be safe.

3. **Increased transparency.** Thanks to new transparency rules the public will get information online, in a user-friendly way, about water reuse practice in their Member States.

**Who will benefit from this proposal?**

This proposal will contribute to more sustainable irrigation by providing our farmers an alternative water supply. It will thus also complement the new Common Agricultural Policy. Our consumers will stay assured that the products they eat are safe and our businesses will see new opportunities, as the proposal is expected to promote research, innovation and investments in water reuse in the EU by improving clarity, coherence and predictability to market operators and technology providers. Last but not least, the proposal will contribute to alleviating water scarcity through better management of our most precious resource – water.

With the proposed Regulation's provisions on information, the public will have online access to information about the quality and quantity of reclaimed water supplied in accordance with this Regulation, permits granted, outcomes of compliance checks, etc. Higher confidence in water reuse practice will contribute to an increased uptake of this practice in the EU.

**What will the proposal mean for Member States?**

Those Member States who consider water reuse as an option in addressing water scarcity and droughts within their river basin management planning will now have clarity as to what requirements must be complied with for the production of reclaimed water for agricultural irrigation. This proposal on water reuse therefore creates a concrete tool for Member States, who are facing water scarcity and droughts, in the wider toolbox of water management. It is also visionary in that it will help prepare future investment decisions, because more water reuse will become necessary throughout Europe, given the realities of climate change.

**What will the proposal mean for those who already produce reclaimed water?**
Member States where water reuse is already taking place will have clarity and assurance that these practices are safe, if they comply with the proposed EU-level minimum requirements. Furthermore, the proposal aims to prevent potential trade barriers (and resulting economic losses) due to insufficient safety of products irrigated with reclaimed water. The existing permits for producing reclaimed water would need to be brought in compliance with the proposed Regulation. Increased transparency is another positive thing for the operators of reclamation plants in their relations with the end users and public.

What will the proposal mean for farmers who use reclaimed water for irrigation?

Farmers will have an alternative, sustainable water supply for irrigation. The proposal will ensure transparency about the quality of reclaimed water produced for irrigation. Furthermore, the proposal will facilitate farmer's compliance with the existing legislation on the hygiene of foodstuffs.

How are compounds of emerging concern addressed in the draft Regulation?

Compounds of emerging concern, e.g. pharmaceuticals, are considered in the proposal in the context of the risk management framework (Annex II to the proposal). Furthermore, the proposal includes a review clause in order to update the minimum requirements with the latest scientific knowledge.

What are the costs and benefits of this proposal?

A thorough impact assessment accompanies the Commission's proposal. It concludes that the overall potential for water reuse by 2025 is around 6.6 billion m³ compared to the current 1.1 billion m³ per year. According to the modelling, an investment of less than EUR 700 million would allow treating more than 6.6 billion m³ yearly with a total cost of reclaimed water below EUR 0.5/m³. At a cost below EUR 0.5/m³, the impact assessment concludes that the proposal would enable reusing more than 50% of the total water volume theoretically available for irrigation from waste water treatment plants in the EU and avoid more than 5% of direct abstraction from water bodies and groundwater, resulting in a more than 5% reduction of water stress overall. This would be a sizable contribution to alleviating water stress in the EU and thereby correspond to the overall objective of the initiative.

Increased transparency and monitoring requirements obviously entail some additional but moderate costs. However, these will be offset by the positive impact on increased confidence in water reuse practices through raising awareness, providing reassurance that experts have transparently analysed what is actually safe for all EU citizens, ensuring a level playing field and thereby provide an incentive for farmers, industry, citizens and others to explore the opportunities stemming from water reuse. This will also mean further research, technology development and investments, as well as job creation.