EU Green Week PARTNER EVENT

Public Water Operators' Strategies to Tackle Water Scarcity and Drought



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#WaterWiseEU









SECRETARIA-GERAL DO AMBIENTE



Aqua Publica Europea



71 MEMBERS

Public water and sanitation operators

90 MILLION

citizens served every day

2 MAIN OBJECTIVES

- Promoting public water management
- Providing a platform for mutual learning

"About 30% of Europe's population is affected by water stress during an average year."

European Environment Agency

Setting the scene

- Intensification of extreme weather phenomena such as droughts, floods and heat waves
- Economic sectors key to the green and digital transition are particularly water intensive

Resilience in action



Objectives:

- 1. Provide an overview of effective approaches and measures that can serve as a reference for the water sector in Europe
- 2. Discuss the responsibility of public operators and of other relevant authorities and stakeholders in defining a shared path towards a sustainable use of water resources

Available on our website through this link: bit.ly/4aBDQeK

1. Water scarcity and drought risk management plan

- A methodology used by water operators to guide their actions in times of drought and water scarcity
- It establishes the best course of action against different drought scenarios to prevent and mitigate their impact
- It usually includes four steps:
 - 1. Conducting a risk assessment
 - 2. Participatory production/elaboration
 - 3. Developing the risk management plan
 - 4. Evaluating



2. The role of water operators to combat drought and water scarcity

Leakage reduction

Leakages in the network can exacerbate the effects of droughts and water scarcity.



Eau de Paris (France) uses smart meters as an effective tool to tackle leakages. Smart meters detect abnormal water consumption in buildings and send real-time signals to the operator, which can then alert the owner and, if necessary, intervene directly to fix the leak.

Network interconnections

Interconnectivity increases water resilience as water from wetter areas can be redistributed to drier areas.



De Watergroep (Belgium) leverages interconnectivity to increase supply security across different areas in Flanders.

Protection of water resources

Protecting water resources helps increase supply of water for various uses, hence reducing vulnerability to droughts.



SDEA (France) encourages farming practices that involve using reduced quantities (or not any) pesticides in catchment areas, no extensive crop cultivation and improved livestock management, with economic incentives.

Communication campaigns

Communication campaigns help raise public awareness of water scarcity situations and provides water saving advice.



Scottish Water (UK) runs the campaign 'Water is Always Worth Saving' highlighting 13 good practices such taking short showers or fixing leaky toilets.



Relations with large water users

In times of water scarcity, but even more generally when demand for water increases, cooperation with industries that heavily rely on water is extremely important.



Uisce Éireann (Ireland) promotes demand reduction in drought-prone areas through Water Stewardship Accelerator Programmes, which provide on-site water risk and planning workshops to help companies review their current water usage and risks and develop a response plan.



3. The role of multi-stakeholder coordination

Water reuse

Water reuse reduces pressures on freshwater resources and provides an alternative source of water.

(Shydria (Belgium) provides treated wastewater to a nearby Audi factory, which will allow the automotive constructor to save 100,000 m³ of drinking water annually.

Nature-based solutions

Nature-based solutions (NbS) can serve as valuable tools for mitigating the impact of droughts and water scarcity.



Viacqua (Italy) has designed Forest Infiltration Areas, which facilitate the recharge of groundwater aquifers by surface waters during non-irrigation months and bring benefits in terms of increased biodiversity and recreational value.



Reservoirs

Water stored upstream in reservoirs can be strategically released during times of high pressures on water resources to replenish water courses or facilitate irrigation. The ecological continuity of rivers needs to be maintained and biodiversity must be conserved.



SMAT (Italy) draws water from the Po river but also from a nearby lagoon basin, used as a reservoir, which can sustain drinking water for around 15 days in times of reduced resource availability. The operator is working on an extension of the basin to increase its capacity from 2 to 5 million m³.

Restrictions

In case of extreme drought and water scarcity, measures that temporarily limit allocation or abstraction rights to some categories of users may be necessary.



Acquedotto Pugliese (Italy) regularly informs local authorities about the expected medium-term quantitative status of water resources based on a predictive model. When a significant risk for future water scarcity is detected, an institutional coordination mechanism is established. The actors that take part in this mechanism can decide on a revision of allocation regimes for some economic activities and particular for agriculture.

Conclusion

- Accurate **data** on water quantity and water usage is crucial for activating different tools in response to varying levels of drought or for the development of long-term water quantity plans.
- A clear **governance** framework for the elaboration of risk management plans and for the management of water scarcity is key to effective decision-making.
- Long-term territorial **planning**, which considers water availability and the costs of remedial actions is fundamental to the sustainable development of territories.
- There is a need to launch a reflection on new financing mechanisms that can complement volumetric tariffing to cover the costs of measures needed to increase water resilience.

Thank you for your attention!

Do you want to get in touch?

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