



Dir EU 2024/3019 and runoff

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UWWTD & Urban Runoff

- Runoff per se is not in the mandate of the UWWTD
- Art. 5 → integrated management of runoff and sewage in cities
- Triggering a process towards control of urban water pollution in a broad sense
- Integrating with urban planning.

Pollution to address

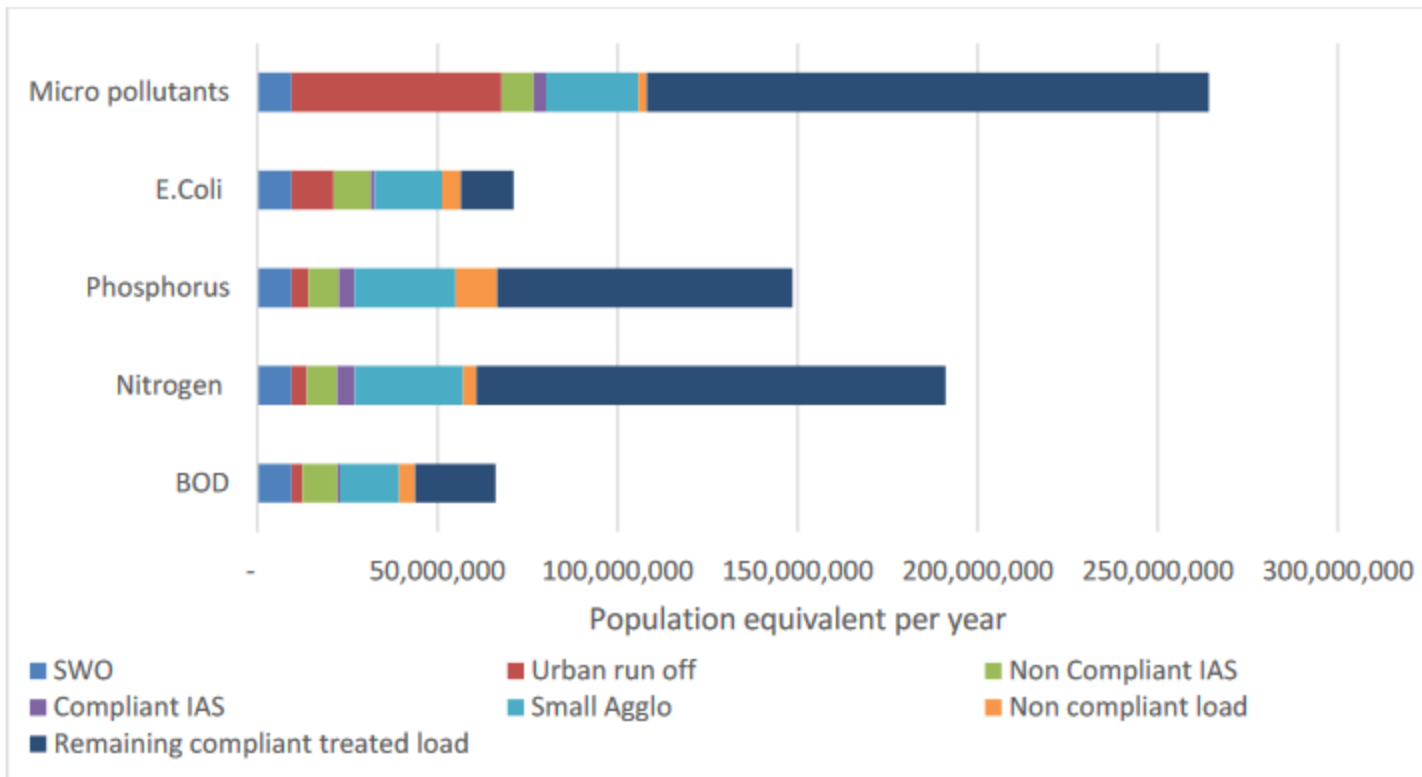
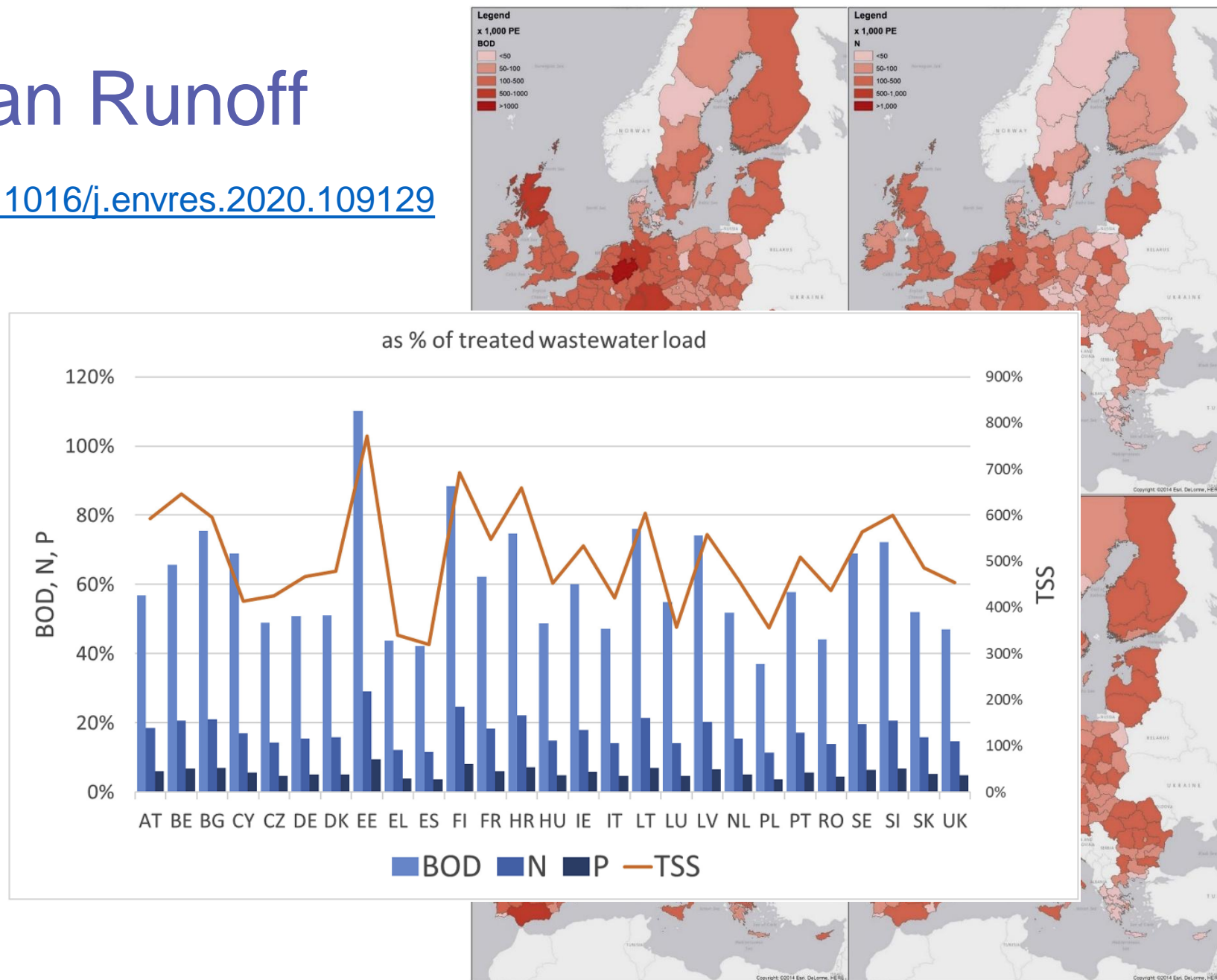


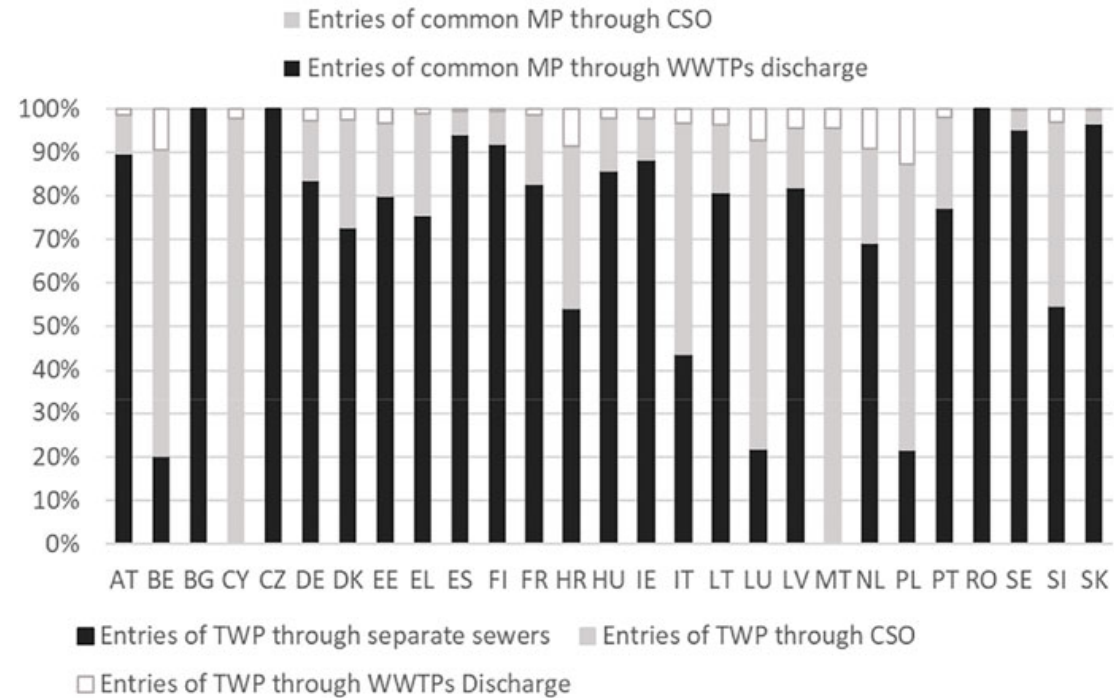
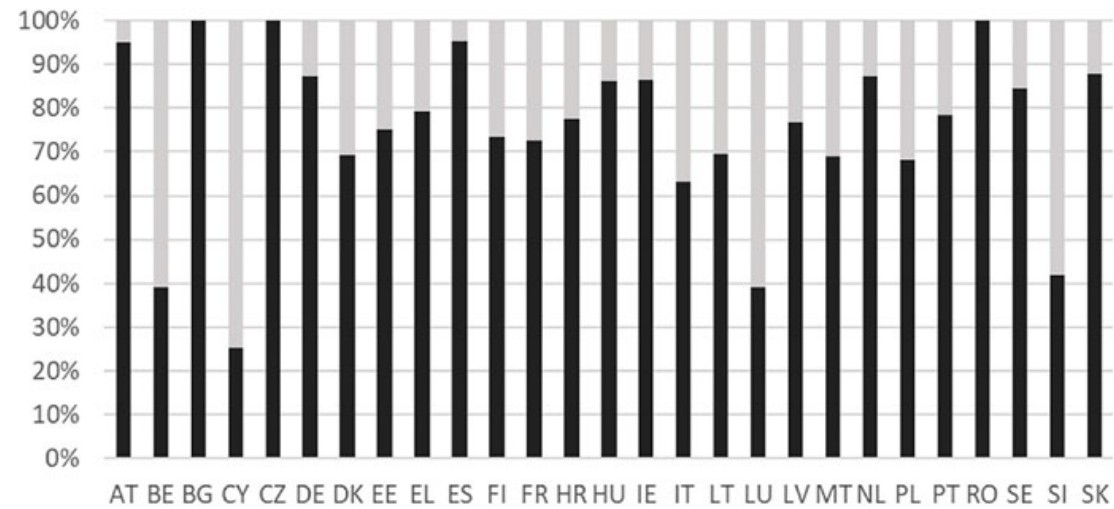
Figure 1: Remaining loads from urban sources (p.e./year) - Source JRC - see Annex 4. Breakdown per MS is provided in Table A7.5 in Annex 7

Urban Runoff

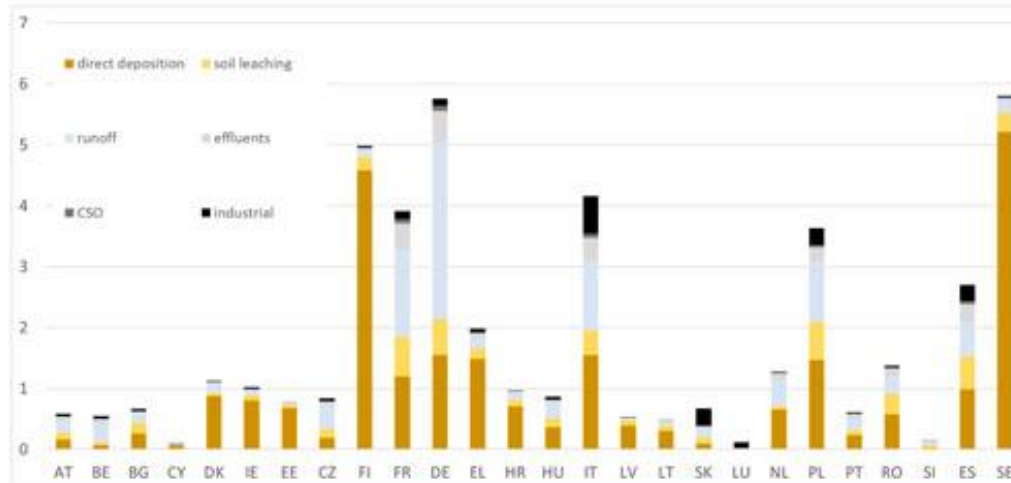
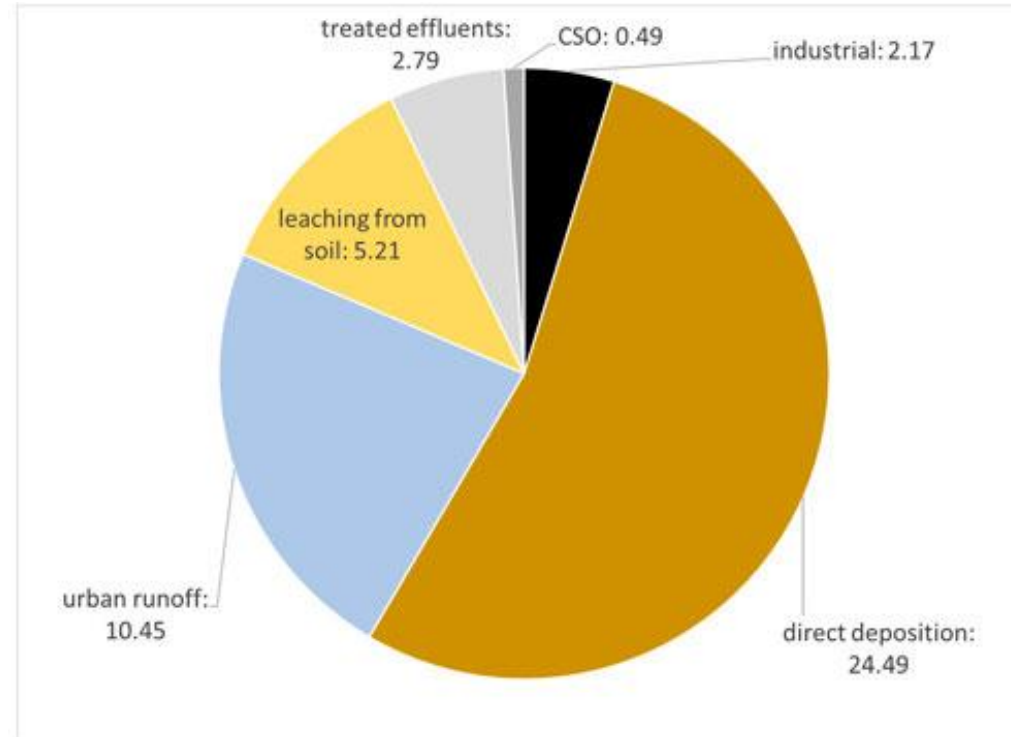
<https://doi.org/10.1016/j.envres.2020.109129>



microplastics



mercury



<https://doi.org/10.3389/fenvs.2022.1021777>

Definitions

‘urban wastewater’ means any of the following:

- domestic wastewater;

- the mixture of domestic wastewater and non-domestic wastewater;

- the mixture of domestic wastewater and **urban runoff**;

- the mixture of domestic wastewater, non-domestic wastewater and **urban runoff**;

‘urban runoff’ means precipitation in agglomerations collected by combined or separate sewers;

‘storm water overflow’ means discharge of untreated urban wastewater into receiving waters from combined sewers caused by precipitation or system failures;

Art. 5: Integrated urban wastewater management plans (IUWMP)

By 31 December 2033, IUWMP for agglomerations of 100 000 p.e. and above.

By 22 June 2028, list of agglomerations of between 10 000 p.e. and 100 000 p.e. where a IUWMP is needed by 31 December 2039

Content of IUWMPs

1. An analysis of the initial situation of the drainage area of the agglomeration :
 - (a) a detailed description of the **network** of collecting systems, the urban wastewater and urban runoff **storage** and conducting capacities of that network and the **existing urban wastewater treatment capacities** in case of rainfall;
 - (b) for **combined** sewers, a **dynamic analysis** using **hydrological models** that take into account **climate projections** and including an estimate of the pollution loads released into receiving waters in case of rainfall;
 - (c) for **separate** sewers, a detailed description of the **monitoring requirements** at relevant points of separate systems where discharges of urban runoff are expected to be polluted.

Content of IUWMPs

2. Objectives for the reduction of pollution from storm water overflows:
 - (a) objective that storm water overflow represents a small percentage (<2 %) of the annual collected urban wastewater load calculated in dry weather conditions; to be met by 2039 for all agglomerations $\geq 100\,000$ p.e.; 2045 for agglomerations $\geq 10\,000$ p.e.;
 - (b) the progressive reduction of plastics.

Content of IUWMPs

3. The **measures to be taken** to achieve the objectives, accompanied with a **timeline for the implementation** of the measures.

+ clear identification of the actors involved and their responsibilities in the implementation of the integrated urban wastewater management plan.

Hierarchy of measures in IUWMPs

- (a) **preventive measures** aimed at avoiding the entry of unpolluted rain waters into collecting systems, including measures promoting natural water retention or rainwater harvesting, and measures aimed at increasing green and blue spaces in urban areas;
- (b) **measures to better manage and optimise** existing infrastructure;
- (c) where necessary, adaptation or development of the infrastructure, with priority given to green and blue infrastructure

Where relevant, water reuse shall be considered in the context of the development of the IUWMP.

To conclude

Urban runoff is a problem further exacerbated by combined sewer overflows

The new Directive requires to start a **process** around IUWMPs.

Integrating water management in **urban planning**

Greening

Adaptation to climate change and water resilience

Thank you



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