

# Thematic Areas

## Background Document

### Thematic Area 1: Organic, Nutrient and Hazardous Substances Pollution of Surface and Groundwater

- The ICPDR has identified three pollution related significant water management issues, the organic, nutrient and hazardous substances pollution of surface waters. Moreover, groundwater pollution by nutrients and chemicals is also considered as an issue of basin-wide relevance. For each of these issues detailed pressure assessments have been carried out and programs of measures have been elaborated in the draft DRBMP Update 2021.
- Organic pollution can disrupt the dissolved oxygen balance of surface water bodies. It stems from urban sewage collecting and treatment systems and industrial dischargers having no or insufficient wastewater treatment. Control of organic pollution needs to put in place appropriate (at least biological) treatment and/or Best Available Techniques.
- Nutrient pollution might trigger eutrophication in lakes, reservoirs and coastal areas and might hamper the use of water resources (e.g., for drinking water supply). Nutrients are emitted either directly from point sources or via several diffuse pathways particularly from agricultural and urban areas. Management of nutrient pollution requires stringent wastewater treatment, application of nutrient free products (e.g., detergents) and best management practices to be implemented in agriculture.



**OUR OPINION –  
OUR DANUBE**  
ICPDR Stakeholder Consultation  
Workshop 2021

**29<sup>th</sup> to 30<sup>th</sup> June 2021**  
– Online via Zoom –

Tuesday 29<sup>th</sup>, 09:00 am – 15:00 pm  
Wednesday 30<sup>th</sup>, 09:00 am – 12:00 pm

- Hazardous substances pollution might have acute or chronic toxicity on living organism. Both point and diffuse sources can contribute to hazardous contamination. Moreover, operating industrial and mining facilities pose a risk to water bodies by potentially polluting them via accident events. Phasing out hazardous substances from the market products, enhanced treatment and industrial technologies, appropriate practices for safe application, runoff control and adequate safety and contingency measures at accident hotspots can help capture this type of pollution.
- Groundwater pollution is addressed by the ICPDR for 12 transboundary groundwater bodies of basin-wide importance. The overall assessment of significant pressures on the chemical status identified the nitrate and ammonium pollution as the key factor to be addressed.
- Danube countries have made significant efforts to reduce organic, nutrient and hazardous substances pollution of the surface and groundwater bodies in the DRB by implementing respective measures in urban wastewater, industrial and agricultural sectors. However, further actions are needed in the next management cycle in terms of measures implementation (e.g. improvement of wastewater infrastructure and services, better implementation of good agricultural practices and agri-environmental measures and industrial safety measures), reducing knowledge gaps on emissions and their impacts (e.g., more information on sources and fate of nutrients and hazardous substances) and improving the relevant policy and financial frameworks.



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