

ICPDR Stakeholder Consultation Workshop – 29<sup>th</sup> to 30<sup>th</sup> June 2021



## 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.

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- 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.
- 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.



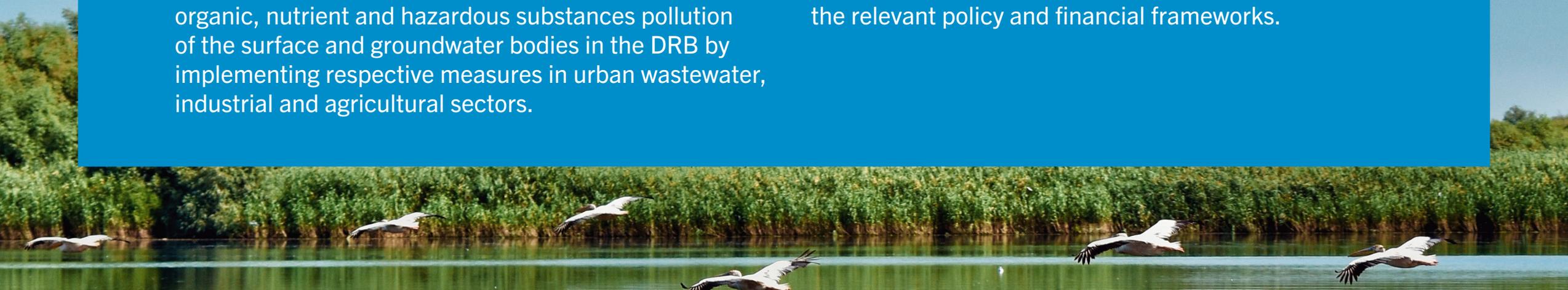
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- Groundwater pollution is addressed by the ICPDR for 12 transboundary groundwater bodies of basin-wide importance. The overall assessment of significant pressures on the chemical status identified the nitrate and ammonium pollution as the key factor 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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## Questions

1. Do you see any important pollution-related challenges that are not yet sufficiently covered in the draft DRBMP Update 2021?
  - a) Are there pressures that need to be addressed or better assessed?
  - b) Are there measures that need to be enhanced, revised, or included in the Joint Program of Measures?

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2. Do you see a need for any additional basin-wide activities to be initiated or supported by the ICPDR to reduce and control pollution?
  - a) By developing harmonized basin-wide assessments?
  - b) By elaborating regional strategies and guidelines?
  - c) By providing Danube countries with opportunities for knowledge transfer on measures implementation?

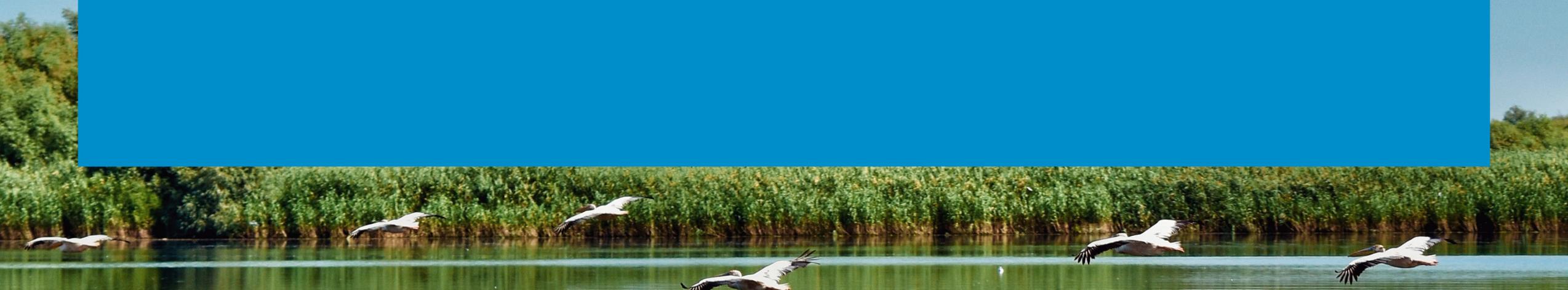
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## Questions

3. Which specific actions would you suggest to further enhance cooperation and coordination with relevant sectors – such as agriculture, waste and wastewater management, and industry – for the sustainable management of the Danube River Basin's waters?





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### Highlights from the Discussion

- **Social Impacts**
- **Biodiversity/ecosystem impacts**
- **Emerging issues**
- **Agriculture / other sectors**
- **Hotspots**



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### Highlights from the Discussion

- **Public outreach:** access to information, difference in public understanding of water quality and what data shows, and how the public sees potential interventions (there are a million pollutants, some are concerning)
- **Social impacts,** including equity issues, upstream/downstream dynamics (also in terms of financing)
- **Biodiversity/ecosystem impacts:** fish migration, ecosystem services, etc.
- **Emerging issues:** floating plastic, microplastics, microbiological contamination, antibiotics
- **Other management instruments:** UWWTD, Drinking Water Directive, Nitrates Directive, link to WFD
- **Agriculture:** not just water quality and quantity, but energy (pumping), types of pollution, different impacts in different settings (e.g. floodplains), IPCDR role in harmonizing sectoral approaches
- **Accident hotspots:** cost-benefit analysis of prevention, climate change impacts
- **Reservoirs:** accumulation of pollutants and sediment in reservoirs is an issue
- **Groundwater** pollution sometimes overlooked: groundwater to be considered as an ecosystem (groundwater ecology approach)
- **Soil** conservation, fine sediment issue
- Promoting **multi purpose measures** (water retention, floodplains), considering their nutrient retention potential
- Consider **nexus** approach (food production, irrigation need, water demand, pollution, energy)
- **Climate change:** impact on quantity and quality



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### Calls to action

1. **Global source-to-sea:** more engagement with global initiatives that link source to sea management
2. **Translate information to the public:** capacity building, investigative pilot projects, “translating” information
3. **Align management instruments:** e.g. better links and harmonization between policies (Water Framework Directive, Drinking Water Directive, Urban Wastewater Treatment Directive, Common Agricultural Policy)
4. **Reach out to other sectors proactively,** particularly agriculture and waste management
5. **Asses the impact of the CAP revision:** IPCDR and others to assess the impact of the CAP revision, and needs going forward
6. **Include considerations for transnational coordination** in all projects, synergy and cooperation with EUSDR
7. **Stronger attention to groundwater**
8. **Construct plans in ways that can adapt** to emerging issues (e.g. chapter on emerging pollutants that can be updated as situations evolve)
9. **Build the case for preventative measures** for pollution accidents using cost-benefit analysis
10. **Shift to source-based framing and regulation** (informed by better source-based analysis, instead of substances)
11. **Narrow knowledge gaps, build a science-policy interface**



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### Summarizing messages:

- **Data gaps:** Important data gaps to be filled between scientific understandings of pollution issues and legislative aspects (e.g. groundwater, accident prevention, different pollutants/sources)
- **Alignment with different directives and management mechanisms**
- **Engagement with other sectors**, including agriculture
- **Public engagement:** Further public engagement around pollution is crucial, but the “how” deserves careful consideration
- **Social and ecosystem impacts:** pollution impacts can highlight equity aspects
- **Bring forward less visible dimensions of pollution and adjust to emerging issues:** groundwater, microbial pollutants, microplastics, etc.
- Take into account **climate change** impacts