

# *Managing the Danube River Basin: Current and Future Challenges*

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# The Danube River Basin



- ✓ 800.000 km<sup>2</sup>
- ✓ 10% of surface Continental Europe
- ✓ 19 countries
- ✓ 79 million people
- ✓ Role model in transboundary cooperation



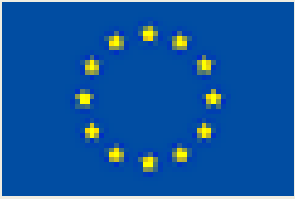
# Transforming Diversity into Cooperation Commitment



The Convention was signed by 12 Contracting Parties

Only 1 was an EU Member State back then: Germany

1995: Followed by Austria in 1995



**2000: EU Water Framework Directive enforced;**  
Obligatory implementation for EU MS and Accession countries

2004: CZ, HU, SI, SK become EU MS

2007: BG, RO become EU MS

2013: HR becomes EU MS

**High diversity of ICPDR CPs: 9 EU MS / 5 Non EU MS**

- Economy, history and politics

Different legal basis transformed in more cooperation

- **Sofia Declaration signed in 2000**

- Non EU MS implement EU WFD/FD as far as possible

- Learning from each other

# Cooperation with EUSDR

## Joint Paper on Cooperation (2014) – Mandate & Tasks

- EUSDR
  - Seeking coherence between **existing funds, institutions and policies**
  - Providing **coordination in the alignment of funding**
  - Strengthening **synergies and complementarities** while avoiding duplication or overlapping of activities coordinated by ICPDR
- ICPDR
  - Legal basis of **cooperation in the entire field of water management**
  - Covering both **technical work and political steering**
  - Playing a **key role in the implementation** of the Danube Strategy, in close coordination with the Priority Areas 1A, 4, 5 and 6



# Challenges and Activities

Joint identification and tackling / Sharing Information



Künzelmann, UFZ



ICPDR/Mello



Transnational Monitoring

Climate Change Strategy

Greener Navigation

Tailings Management



Stakeholder Involvement/  
Public Participation



Künzelmann, UFZ



Joint Danube Survey

Accident Warning System

Sustainable Hydropower

Sustainable Agriculture

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of the Danube River  
Internationale Kommission  
zum Schutz der Donau

# Transforming National RBM Approaches into Basin-Wide Ones



2021 / 3<sup>rd</sup> Edition



2021 / 2<sup>nd</sup> Edition

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## Danube Declaration 2022

On 8 February 2022, in Vienna, the ICPDR convened its 4<sup>th</sup> Ministerial Meeting of Ministers and high-level representatives responsible for water management from the 14 Danube River Basin countries (Austria, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Germany, Hungary, Montenegro, the Republic of Moldova, Romania, Serbia, Slovakia, Slovenia, Ukraine) as well as the European Commission.

This Ministerial Meeting endorsed two essential plans for the Danube: the updated **Danube River Basin Management and Danube Flood Risk Management Plans**. The meeting also adopted the 2022 Danube Declaration, which shows the highest level of commitment for the ICPDR concerning its future work to address the Danube basin's shared challenges.

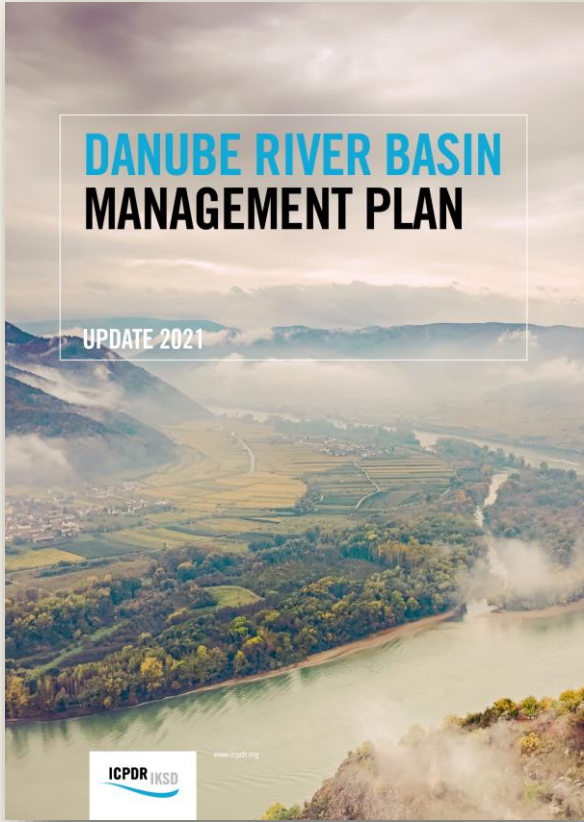
### Danube Declaration – Let us explain!

Every six years, a new and updated 'Danube Declaration' is signed and adopted by the ICPDR countries, updating, and extending the objectives and direction of travel for the Danube River Basin (DRB). It's a vital part of strengthening the ICPDR's goals for improving and maintaining the DRB.

# Transforming National RBM Plans into Basin-Wide Ones



## 5 Significant Water Management Issues



**Organic Pollution**



**Nutrient Pollution**



**Hazardous Subst Pollution**



**Hydromorphological Alterations**



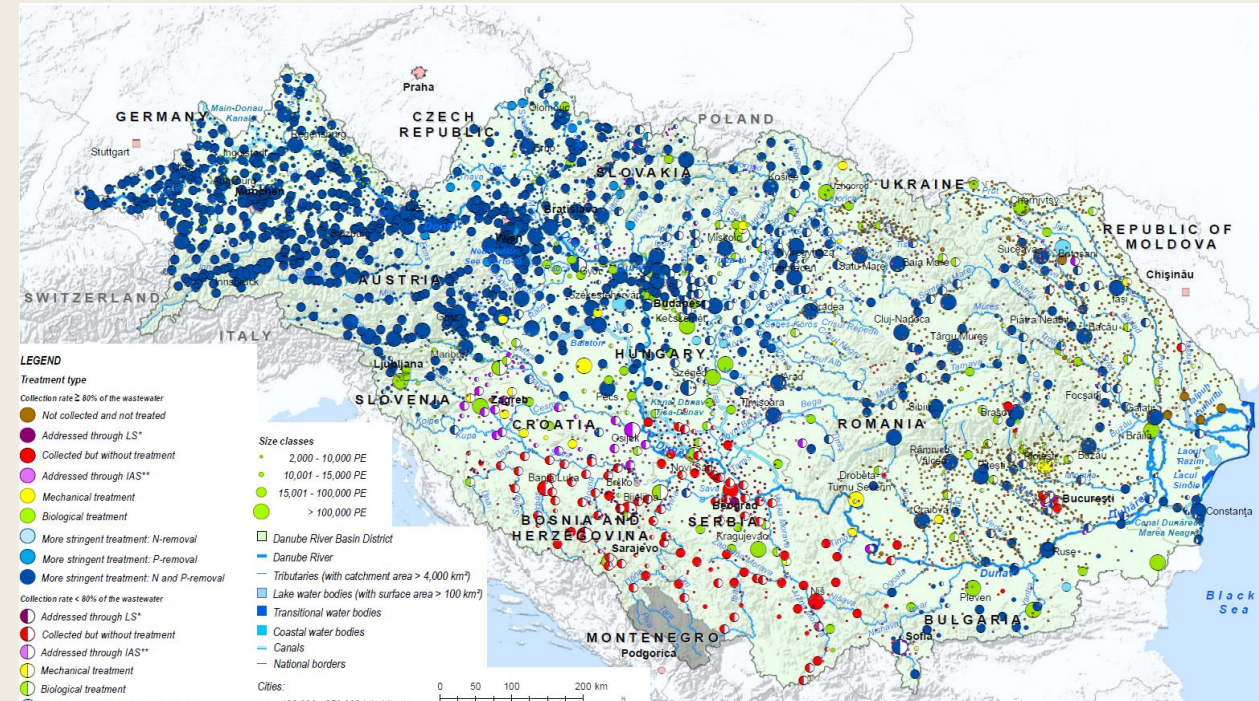
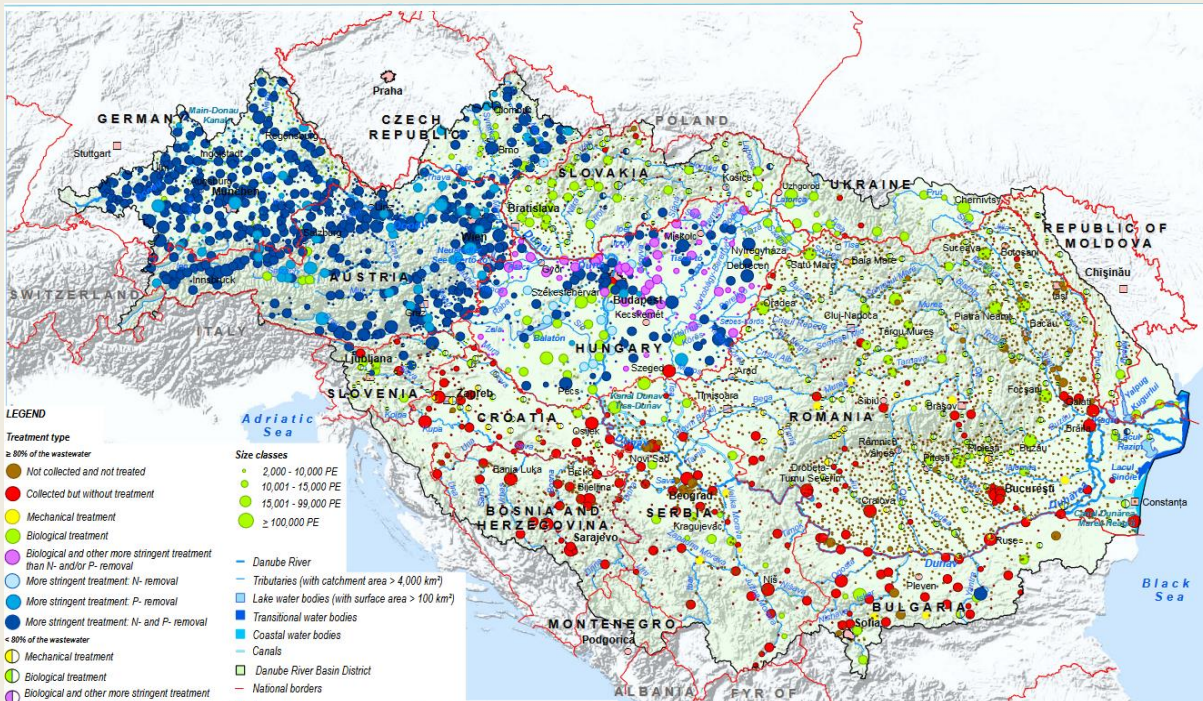
**Effects of Climate Change (drought, water scarcity, extreme hydrological phenomena and other impacts)**

# Achievements: Improving Basin-Wide Wastewater Treatment



## Urban Wastewater Treatment 2009

## Improved Urban Wastewater Treatment 2021





# Improving Wastewater Treatment/Water Status: Progress 2009 - 2021



- 60% organic emission

<b>Investments</b>	<b>€ 28 billion</b>
Wastewater Infrastructure	45 million PE / appr. 6000 projects
Ongoing/Planned Projects	26 million PE

- 30% nitrogen emissions

- 50% phosphorous emissions

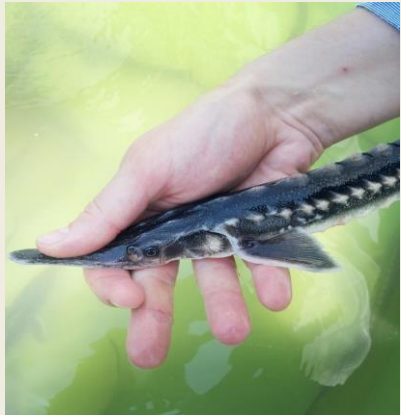
<b>Investments</b>	<b>€ 12 billion</b>
Nutrient Removal	35 million PE / appr. 1700 projects
Ongoing/Planned Projects	13 million PE
Agricultural Best Practices	> € 95 billion

# Transforming National RBM Approaches into Basin-Wide Ones



- 2008: Protecting our Flagship species the Sturgeon – Task Force
- 2023: Feasibility options to make Iron Gate Dams I&II passable for fish
- 2022 onwards: Work on Feasibility for Gabčíkovo passability

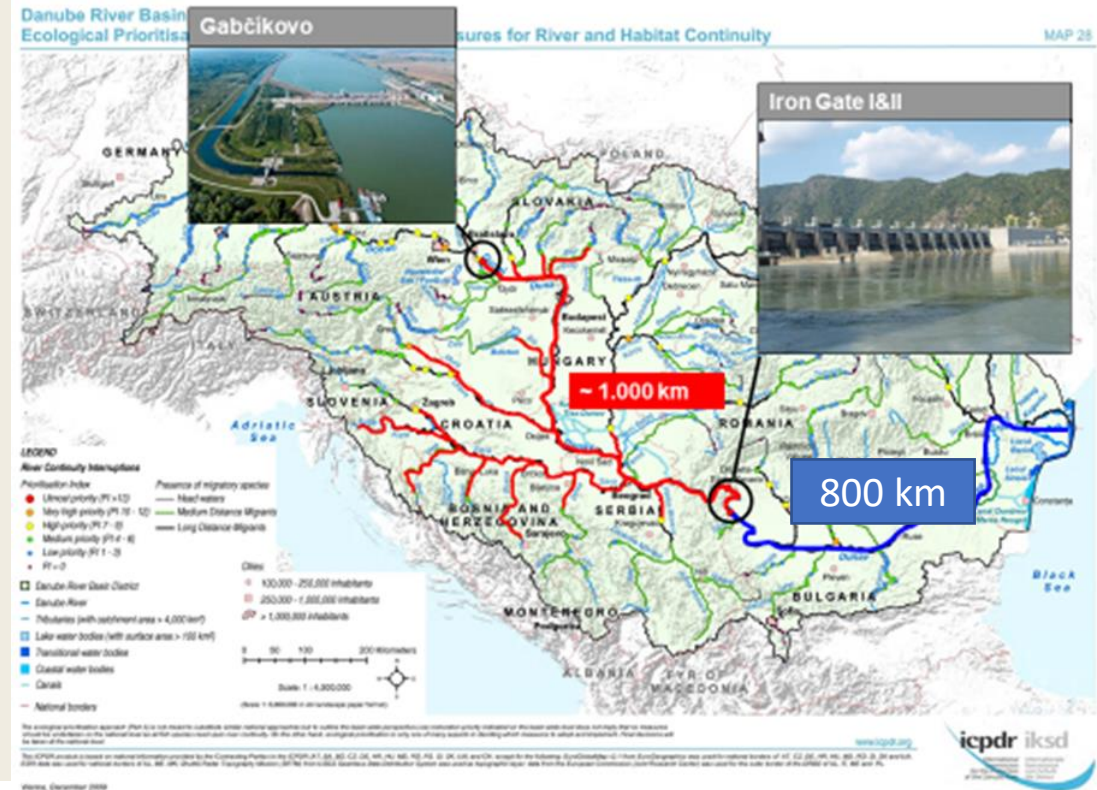
**Aim: Connect 1.800 km of the Danube itself and to the Black Sea**



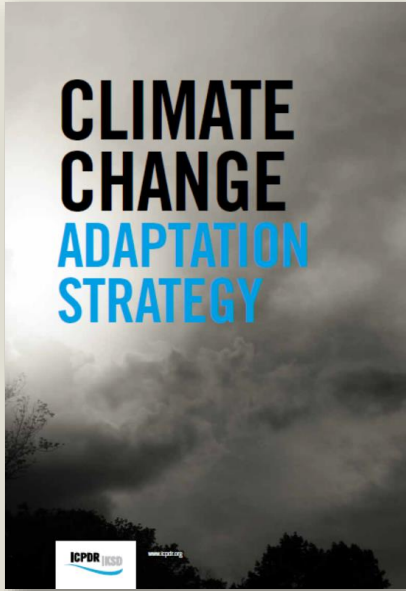
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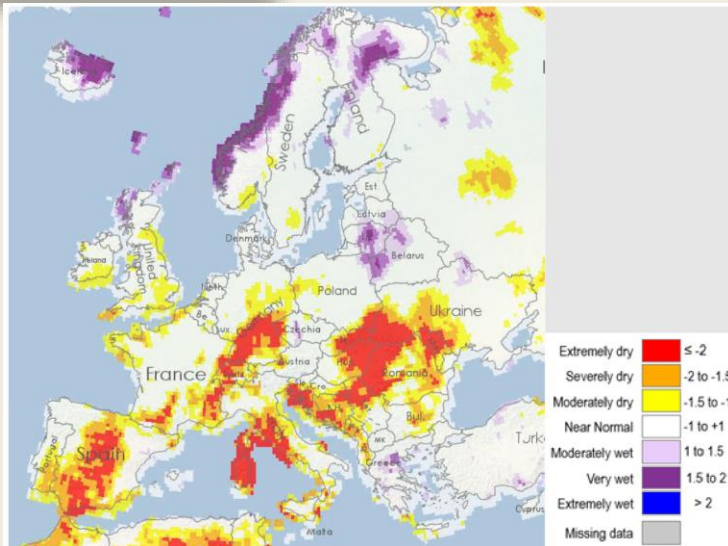
# Transforming News Challenges into Basin-Wide Action



2018

- Clear trend in increasing temperatures and less precipitation over last 30 years
- Drought events and low flows in rivers became increasingly frequent
- Economic losses are linked to drought events

- Internal *ICPDR workshop on Droughts and Low Water Levels in the DRB* on 16 June 2023
- Drought Risk and Management Workshop, Bucharest, 30 – 31 October 2023
- EUSDR Climate Conference, Budapest, 28 November 2023



**ICPDR Overview Report on Droughts and Low Water Level to be developed by mid 2024**



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# Stakeholder Involvement

- ICPDR's management continuously transformed over time to involve stakeholders

- 24 Observers

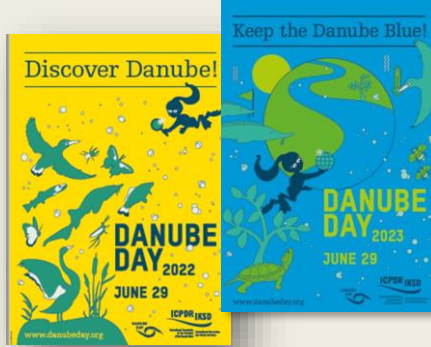
- 2004:** First Danube Day celebrated

- 2007:** Joint Statement on Navigation & Environment

- 2013:** Guiding Principles on DRB Sustainable Hydropower Development

- 2021:** Policy Paper & Guiding Principles on Sustainable Agriculture

- Future:** Ensure involvement of water users in context of climate change to ensure equitable water use



Sustainable Navigation



Sustainable Hydropower



Sustainable Agriculture



# Danube River Basin - Way into the Future



## Continue reacting to challenges with transformation

- Basin-wide cooperation is the key tool

## Economic and climate change situation is a challenge in DRB

- Observe possible hampers on cooperation and counteract flexibly with will & trust
- Ensure adaptation to fast changing conditions in a **faster/more flexible way**

## ▪ **Identify & respond to current and future challenges** so that ICPDR and Danube

- Stays a connector and leave no single country behind
- Stays a champion in cooperation – also in the future
- Stays a transparent information sharing platform

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Thank You For Your Attention!



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