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# Protecting and Improving Danube Waters

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International  
Commission  
for the Protection  
of the Danube River  
Internationale  
Kommission  
zum Schutz  
der Donau

Addressing agricultural influences in the Danube Basin



Philip Weller  
Executive Secretary of the ICPDR  
Budapest, 23 March 2012

# From Black Forest to Black Sea





The World's most international River Basin

# Human activities damaged the Danube



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# Fall of Iron Curtain

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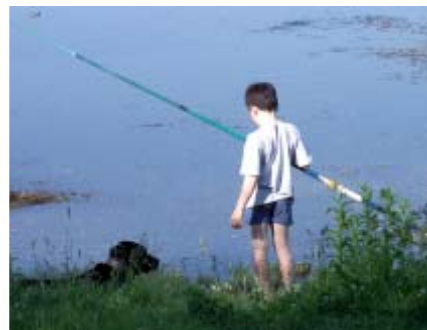
# Danube River Protection Convention



**29 June 1994, Sofia (Bulgaria)**



Protection of water & ecological resources



Sustainable use of water



Reduce nutrients & hazardous substances



Manage floods & ice hazards

**ICPDR coordinates implementation of  
EU Water Framework Directive & EU Flood Directive**

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# Contracting Parties

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Germany



Austria



Czech Republic



Slovakia



Hungary



Slovenia



Croatia



Bosnia & Herzegovina



Serbia



Montenegro



Romania



Bulgaria



Rep. of Moldova



Ukraine



European Union



# ICPDR Delegations of Contracting Parties

ICPDR Secretariat

IMGIS EG

Information Management & Geographical Information System

PP EG

Public Participation

Flood EG

Flood Protection

MA EG

Monitoring & Assessment

APC EG

Accident Prevention/Control

PM EG

Pressures & Measures

RBM EG

River Basin Management

ad hoc S EG

ad hoc Strategic

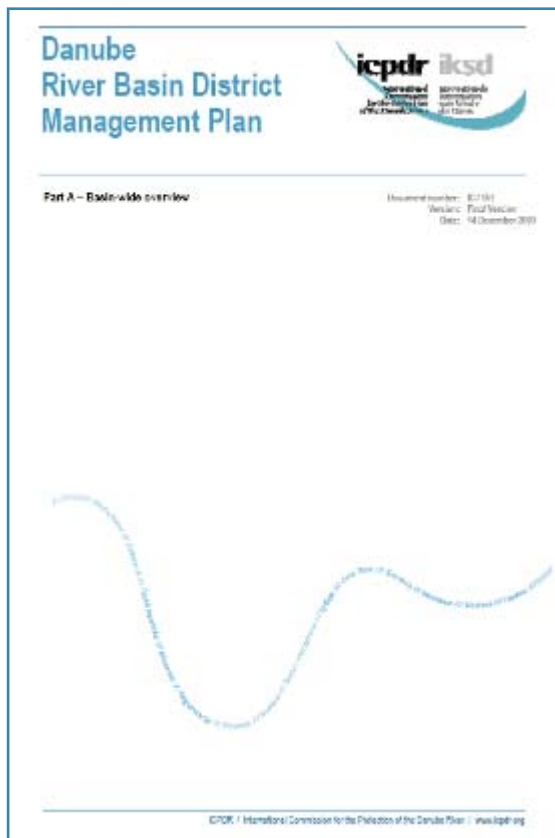
Task Groups



# Stakeholder Involvement: 22 Observers



# Danube River Basin Management Plan



## Reflects/Includes

- Water status of the DRB waters
- Joint Programme of Measures

## Enables

- Conclusions on funding
- Evaluation of measure implementation

# Significant Water Management Issues

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Organic  
Pollution



Nutrient  
Pollution



Hazardous  
Substances Pollution



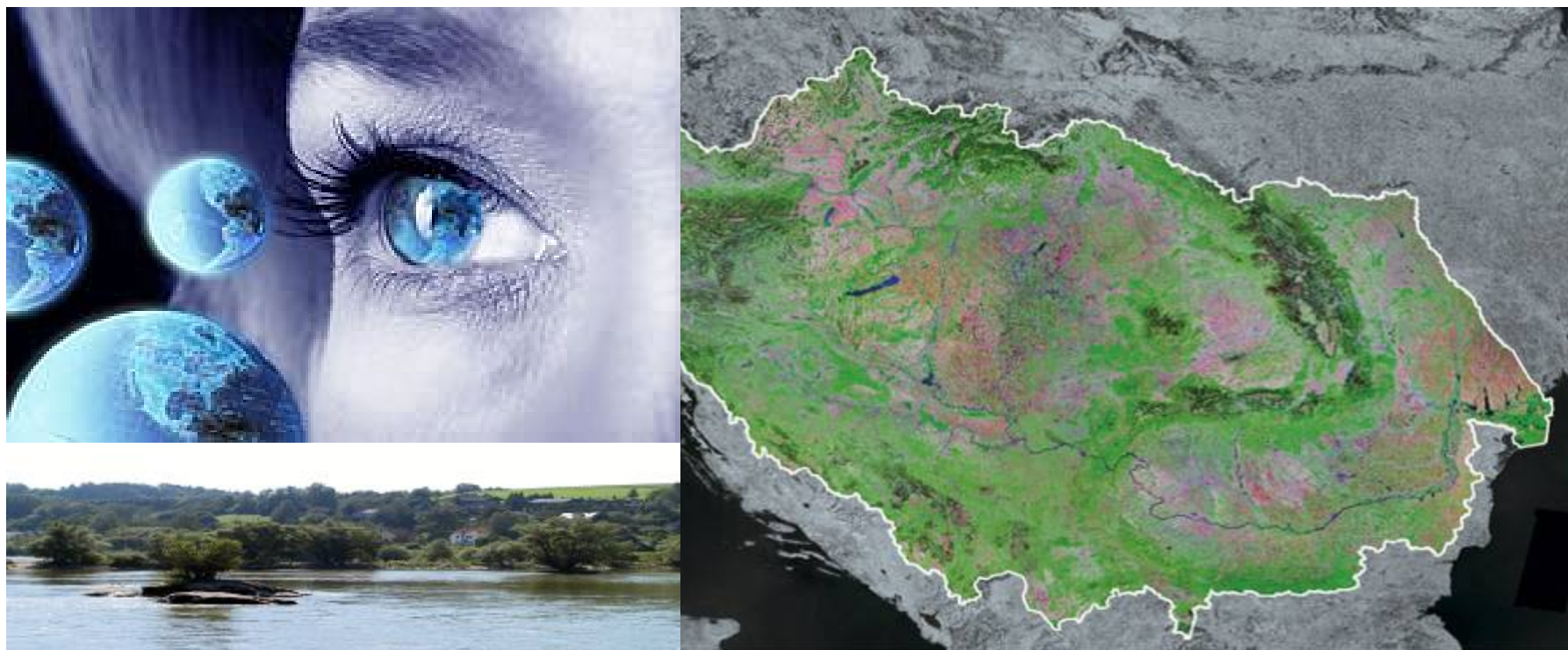
Hydromorphological  
Alterations

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# Visions & Management Objectives for the SWMIs

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# Visions & Objectives

## Organic Pollution

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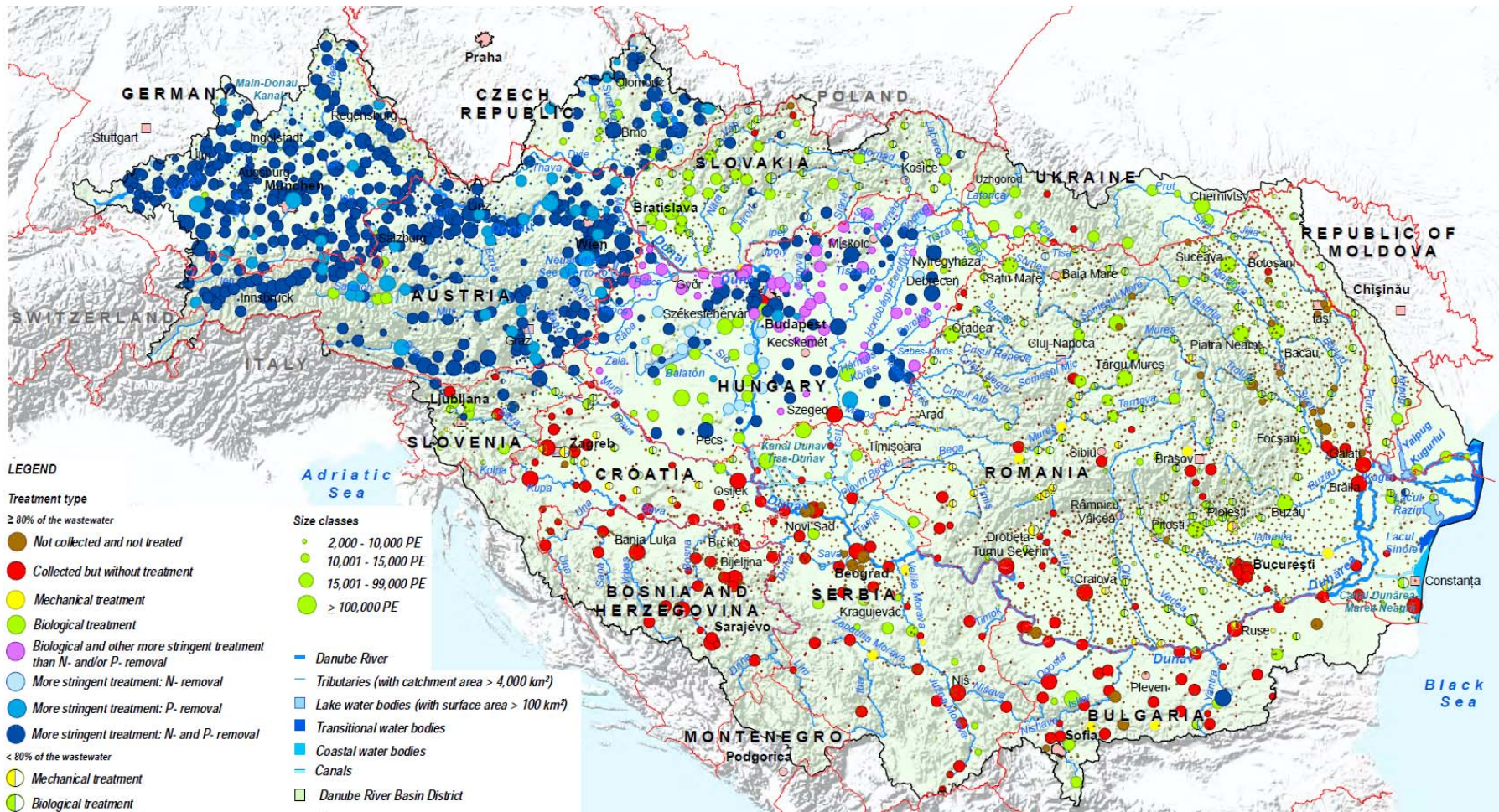


No untreated municipal and industrial wastewaters are discharged into the waters of the Danube River.

# Urban Wastewater Treatment Plants – 2005/6

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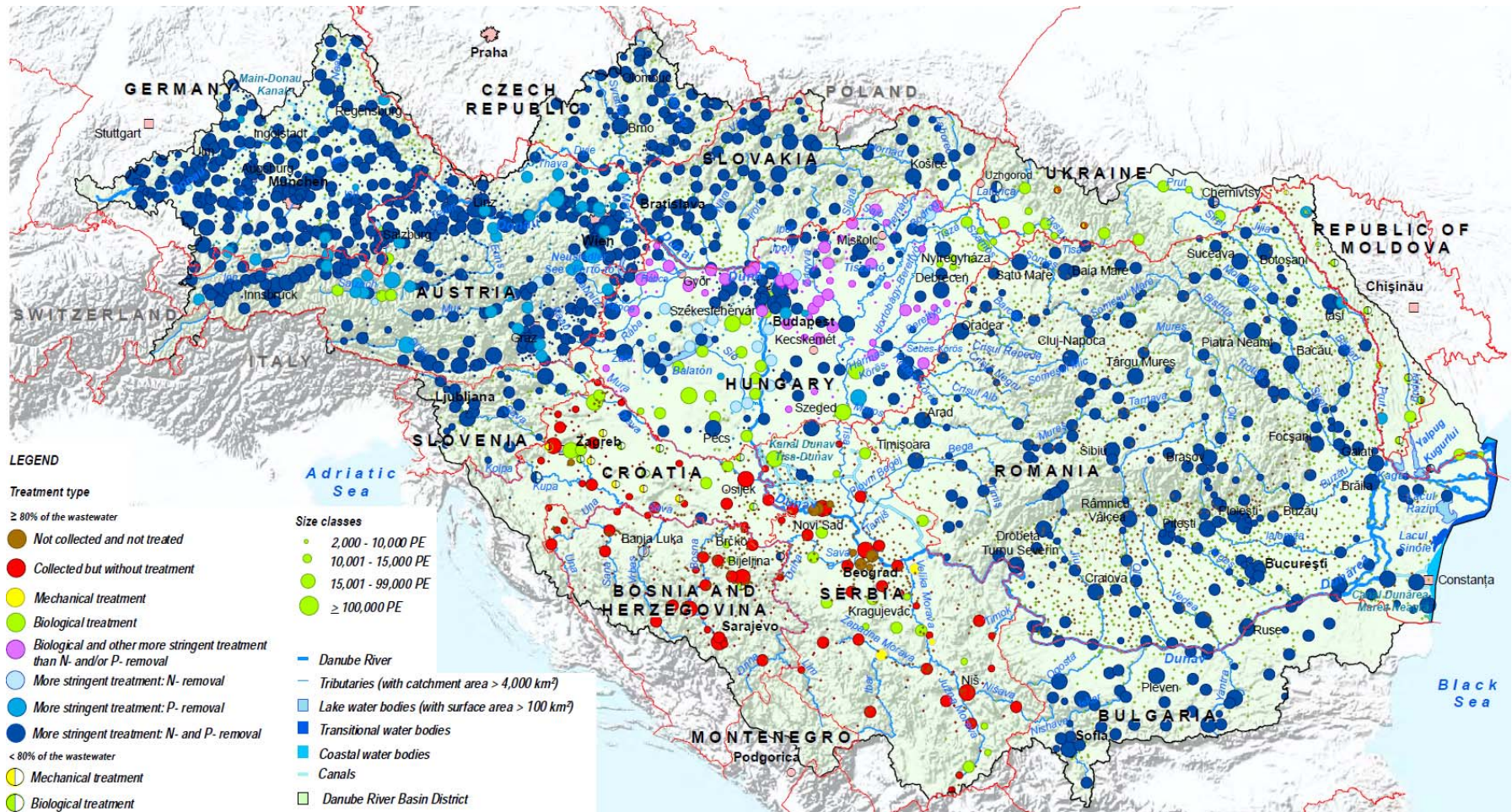
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# Urban Wastewater Treatment Plants - 2015

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# Visions & Objectives: Nutrient Pollution

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The nutrient balance in the DRB is environmentally sustainable. The emissions of nutrients via point and diffuse sources are managed in a balanced way for the entire DRB, that neither the waters of the DRB nor the Black Sea are threatened or impacted by eutrophication.



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# Visions & Objectives: Hazardous Substances

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Hazardous substances are no threat to the aquatic environment of the waters in the DRB and Black Sea Basin. No untreated municipal/industrial wastewater is discharged into the waters of the Danube River Basin. Best available techniques are implemented for the treatment of industrial wastewaters to eliminate and reduce the discharge of hazardous substances.

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# Agricultural Measures in JPM/DRBM Plan

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Broad range of measures in place in Danube countries to address agricultural influences on water

Key lines of action explicitly highlighted in DRBMP

- building storage capacity for manure
- strengthen advisory services and training
- focus on nutrient reduction and pesticides/herbicides use reduction
- land use management

# Areas for Best Agricultural Practice



# Romania



Controlled Application Rates



Traditional Crop Rotations

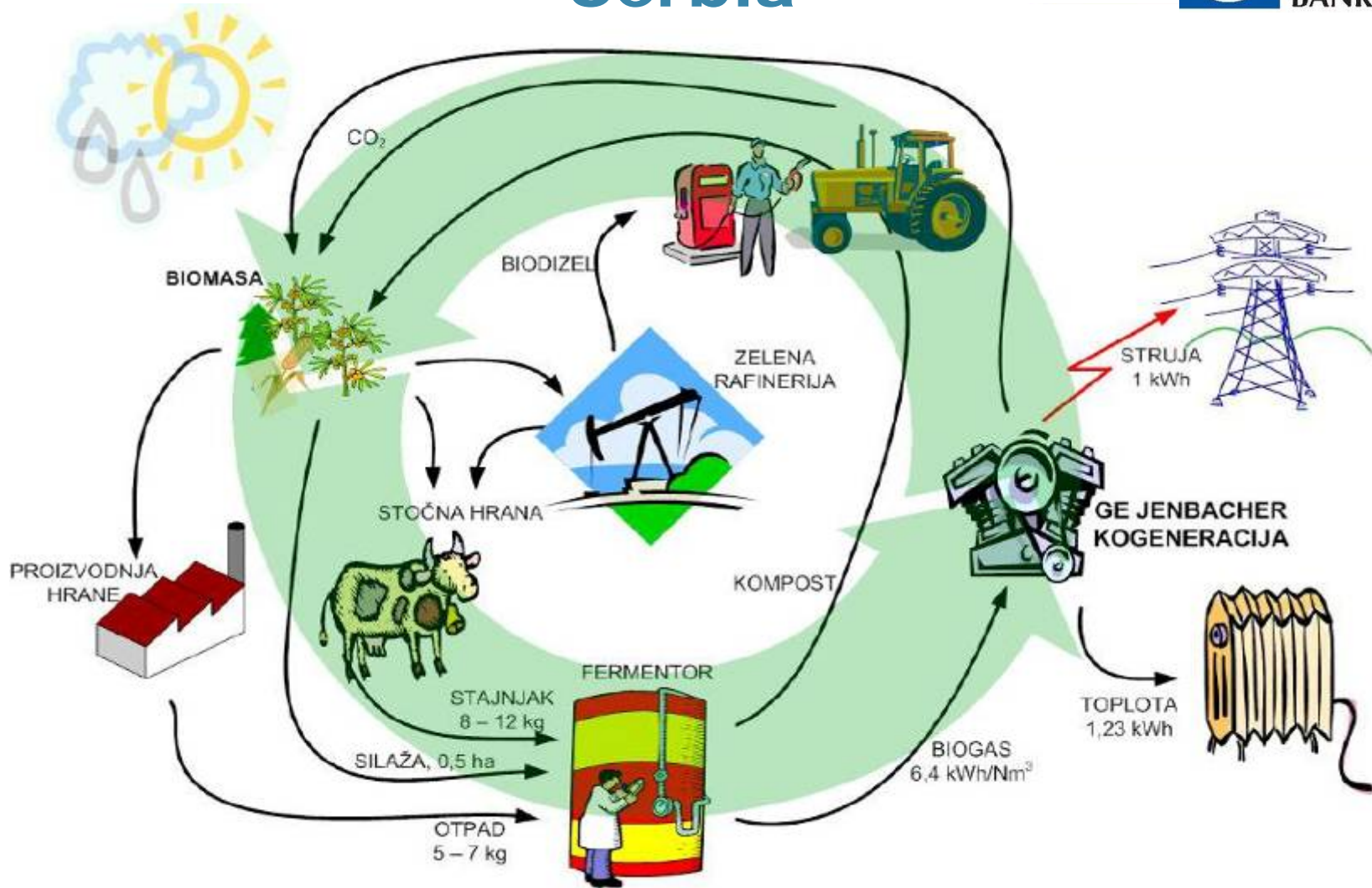
Traditional Manure Platforms



Carefully-managed Manure Heaps

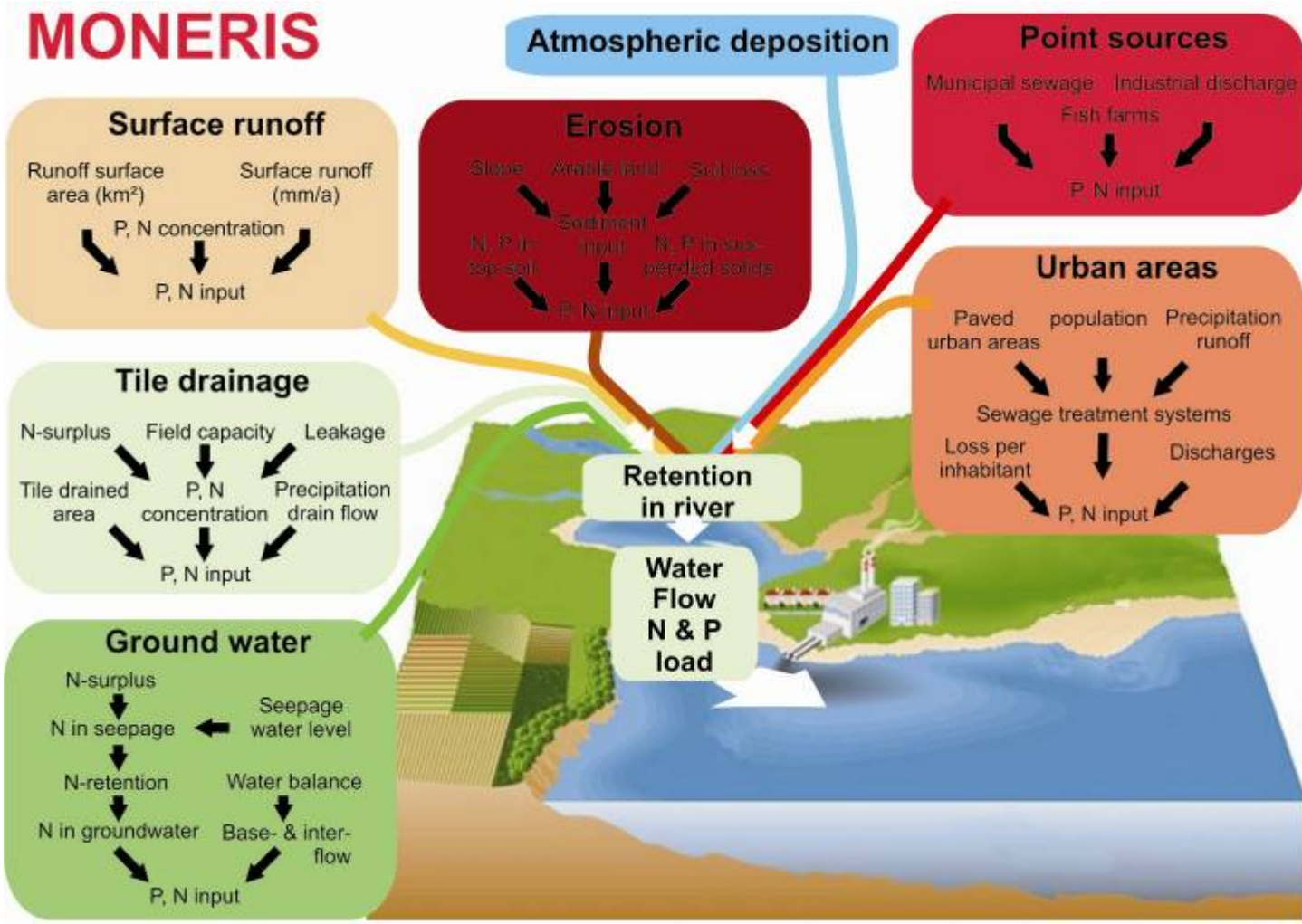


# Serbia

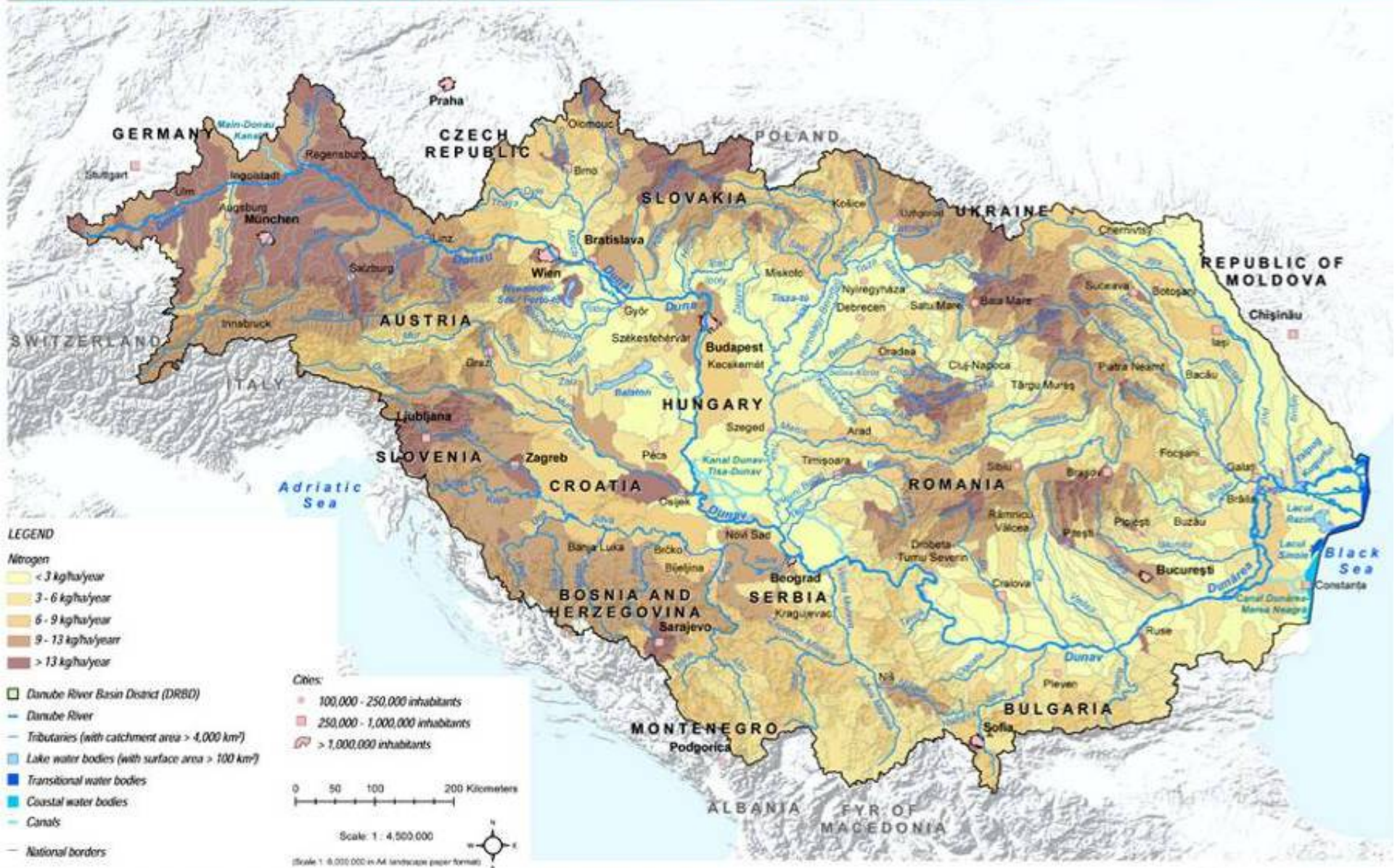


## Danube River Enterprise Pollution Reduction Project

# Modelling pollutant flows



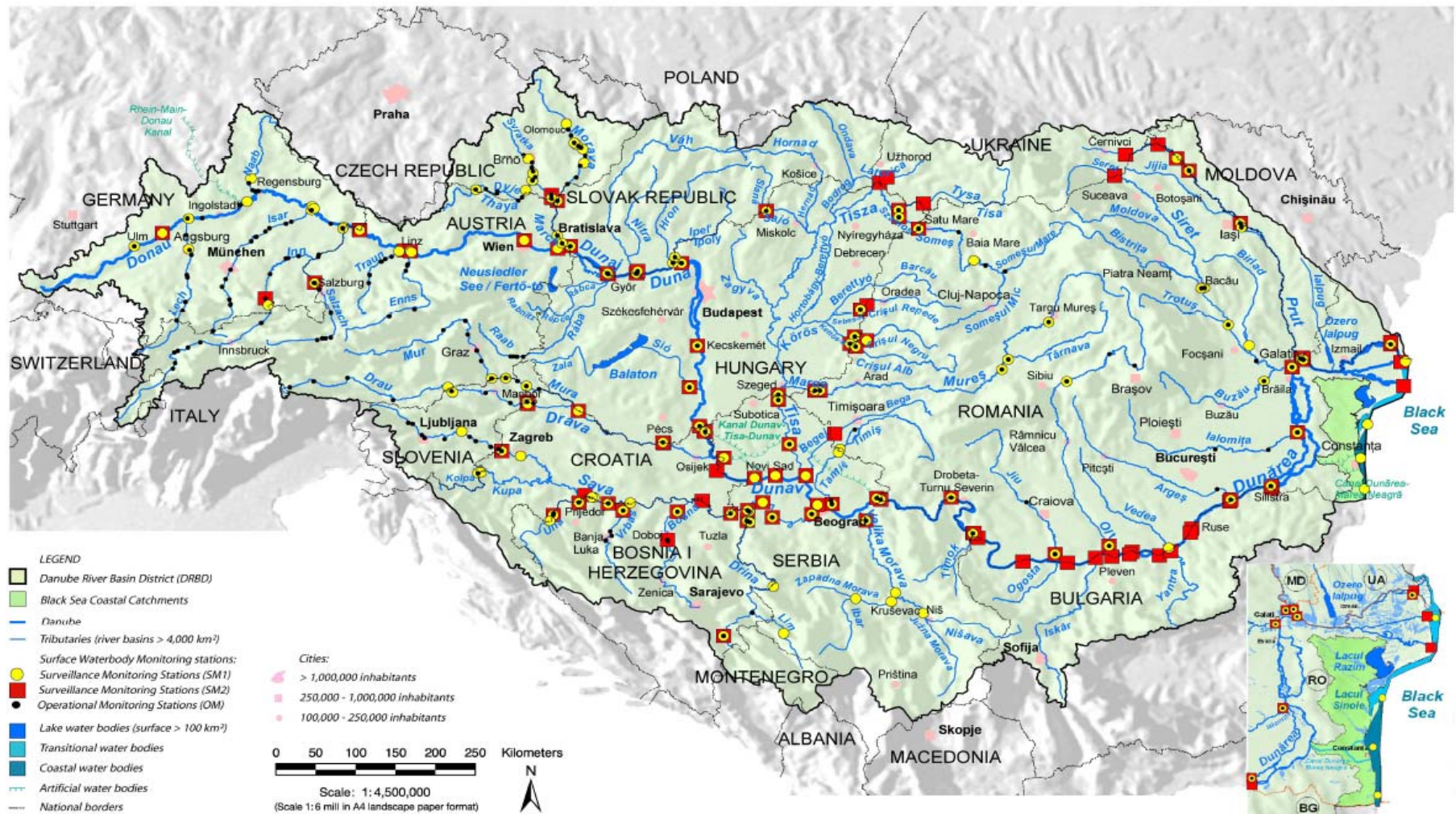
**Danube River Basin District:  
Nutrient Pollution from Point and Diffuse Sources - Baseline Scenario 2015 for Nitrogen\***



# TransNational Monitoring Network (TNMN)

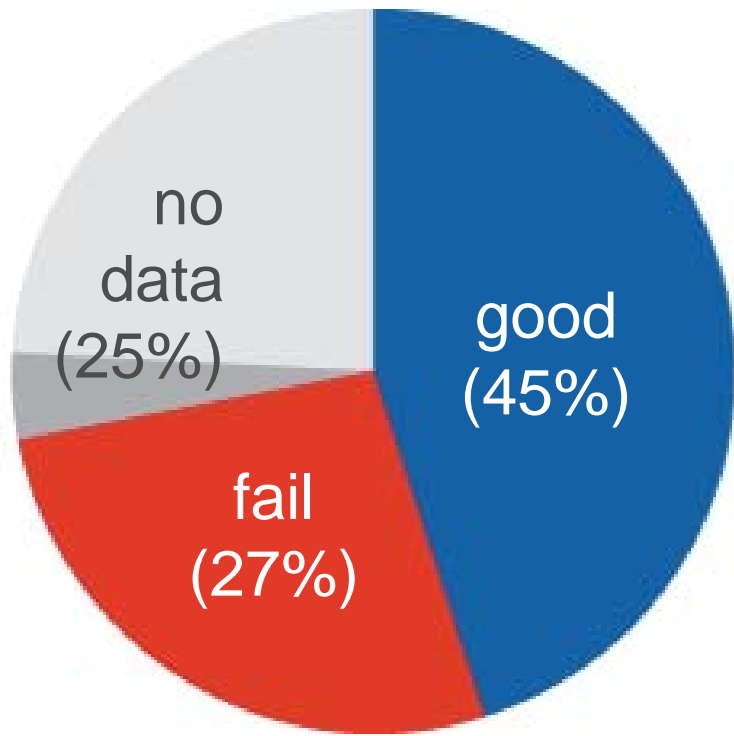
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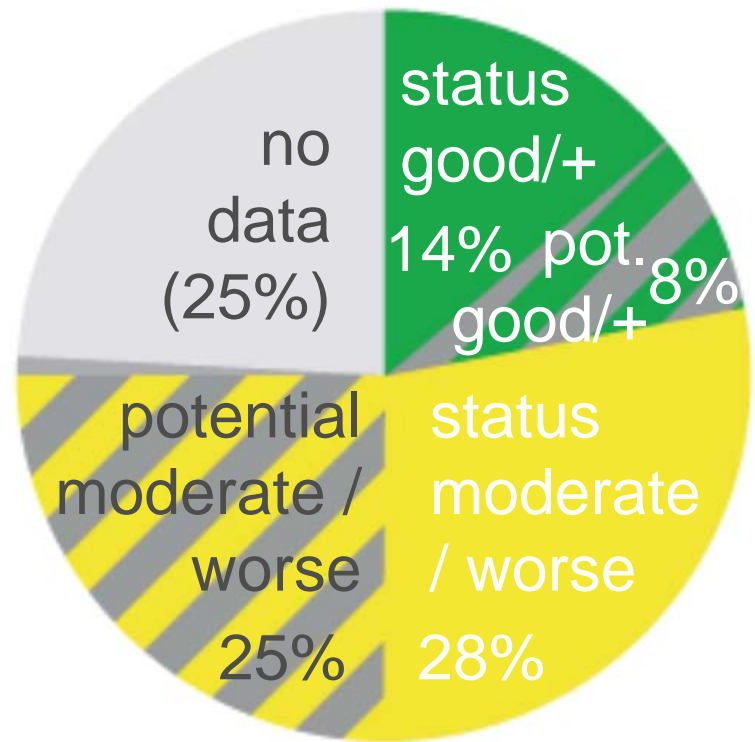




# Condition of Danube & its Tributaries



**Chemical**



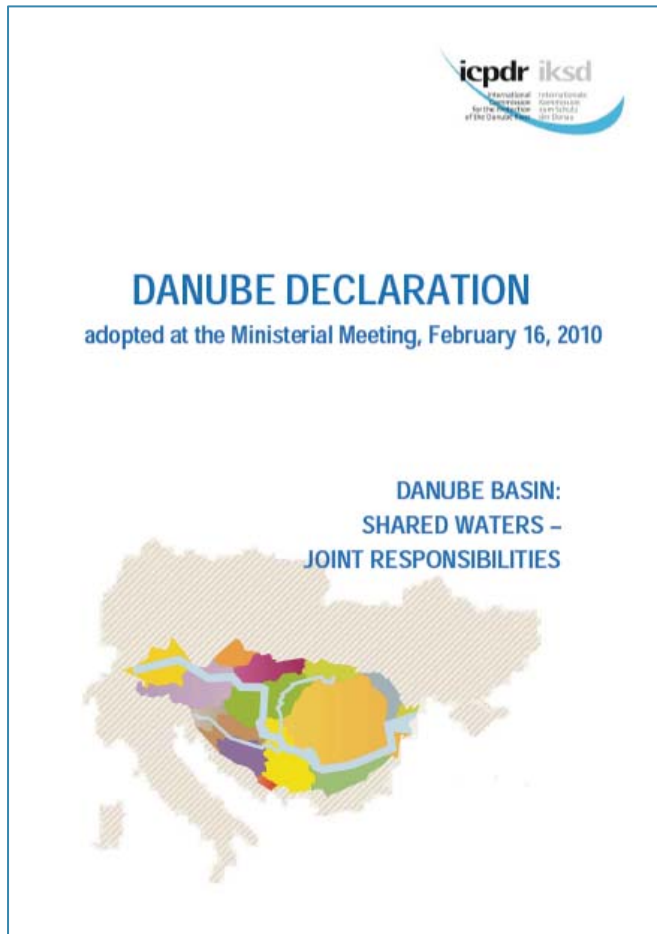
**Ecological**

# Future of integrated environmental policy



Ministerial Meeting, 16 Feb 2010

# Danube Declaration



- Confirms will to contribute to the protection of Black Sea
- Agrees on need for additional initiatives to reduce nutrient loads
- Expresses concerns that a stronger increase in the intensity of agricultural development might offset pollution reductions

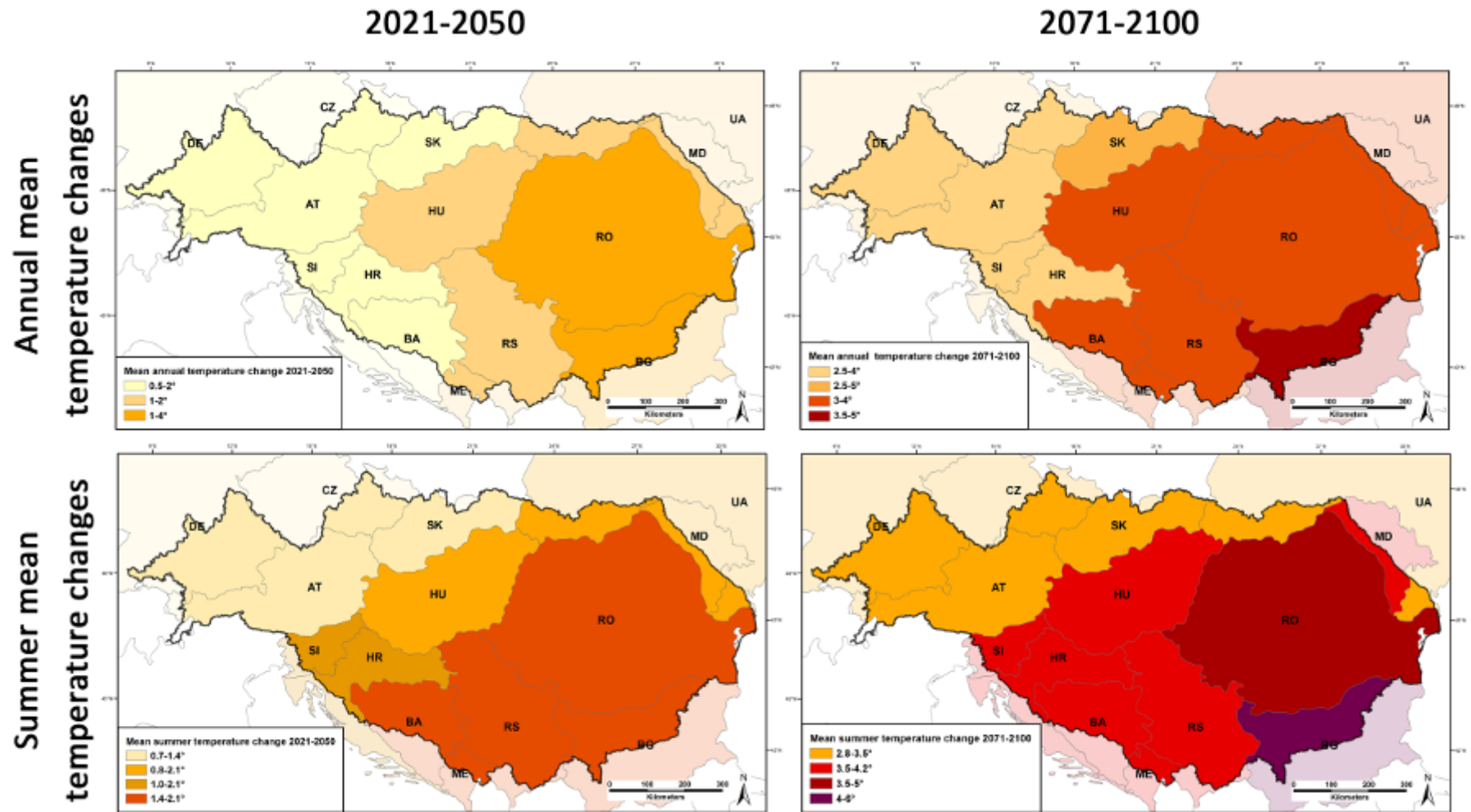
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# How can agricultural impacts on waters be reduced?

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- ⇒ **Nutrients reduction**, e.g. limits in fertiliser use (time and type), nutrient balances on farm level
- ⇒ **Pesticide reduction** in all farming practices
- ⇒ **Organic farming**: input reduction, rotation, intensification of livestock
- ⇒ **Buffer** stripes
- ⇒ **Soil erosion** measures
- ⇒ **Wetlands reconnection**
- ⇒ **Rural Development Programs (CAP Funding)**

# Climate Change Adaptation



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# Impact on Water

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# Exchange of experiences

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Agriculture

- ⇒ Which measures do we have in place?
- ⇒ What do we plan to implement?
- ⇒ Which new measures are needed?

Cooperation between authorities responsible for Water –  
Environment and Agriculture

# Cooperation between business & governments

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# Danube Day: June 29

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# Thank you!

The screenshot displays the ICPDR website interface. On the left, there are two main navigation menus: 'Danube Basin' with links for RIVER BASIN, COUNTRIES, and BLACK SEA; and 'Issues' with links for ECOSYSTEMS, WATER QUALITY, WATER POLLUTION, GROUNDWATER, FLOODS & DROUGHTS, DAMS & STRUCTURES, and RIVER BASIN MANAGEMENT. A secondary 'Sectors' menu includes HUMAN IMPACTS, MUNICIPALITIES, INDUSTRY, AGRICULTURE, NAVIGATION, and NATURE PROTECTION. Below these is an 'ICPDR' menu with links for ABOUT US, PROJECTS & PROGRAMMES, PUBLICATIONS, MEETINGS & EVENTS, and THE CONVENTION. The main content area features a header with the ICPDR logo and tagline 'Working for the Danube River Basin and its People'. Below this is a 'Danube Day' banner with images of a bird, a stone bridge, and a child. A 'Welcome to ICPDR website!' message is followed by a portrait of Mr. Wolfgang Stalzer, ICPDR President 2012. The news section includes three articles: 'AUSTRIA TAKES OVER ICPDR PRESIDENCY', 'DANUBE WATCH 3-4/2011', and 'CZECH VERSION OF THE PLATINA MANUAL PUBLISHED'. A fourth article, 'INLAND WATERWAYS COMES TOGETHER TO ADDRESS DIFFERENCES', is partially visible at the bottom.

Further information: [www.icpdr.org](http://www.icpdr.org)