

# **MARINE STRATEGY FRAMEWORK DIRECTIVE (MSFD) Regional Training**

18 - 20 May 2015

ECRAN

Implications of MSFD implementation for the  
Program of Measures in Drina River Basin



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# Structure of the presentation

Drina River Basin – interfaces with MSFD

Marine Spatial Management Plan

PoM of Drina RB effects on the Black Sea

Nutrient pollution vision

Drina RB measures

What to next

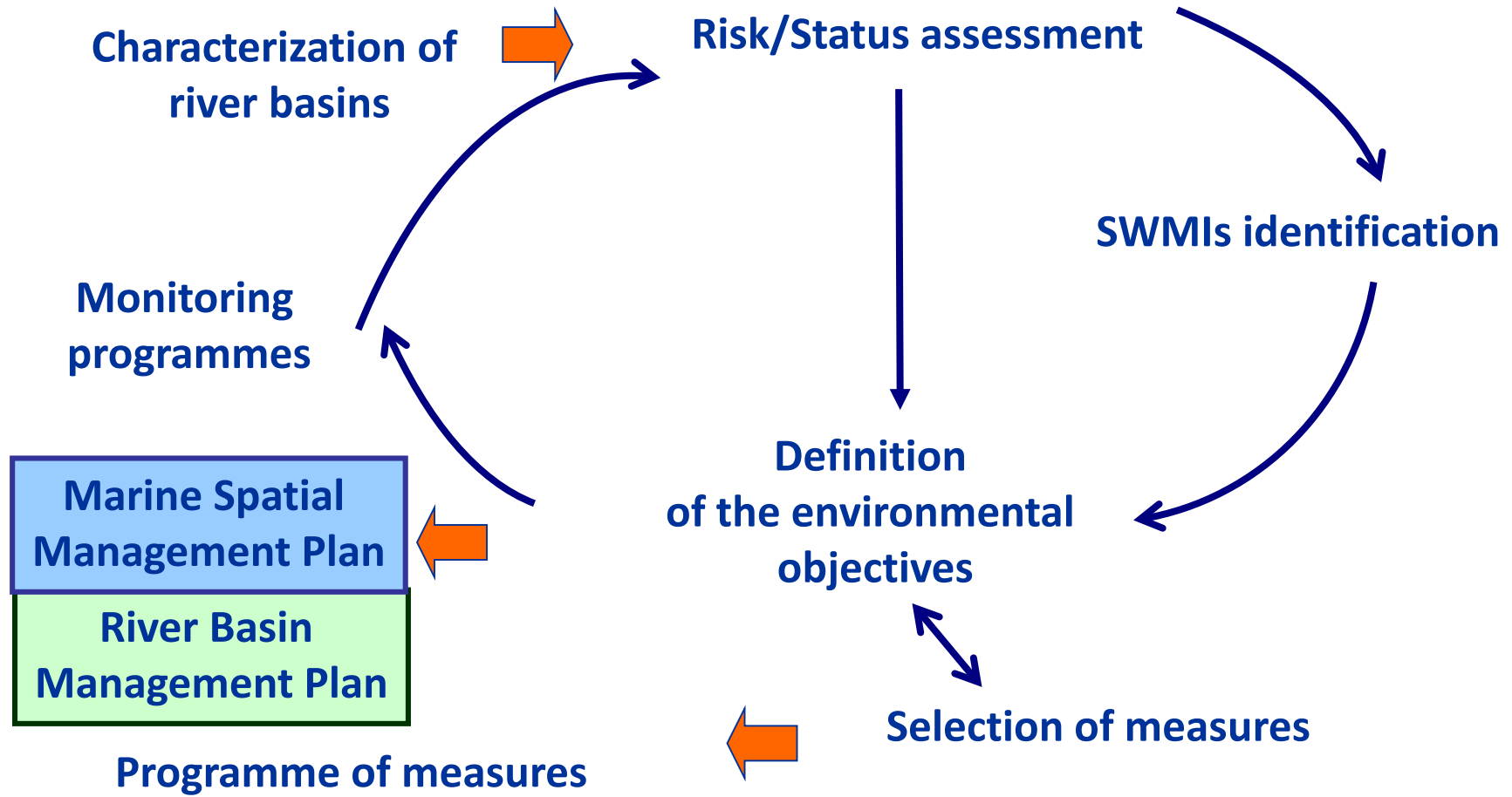


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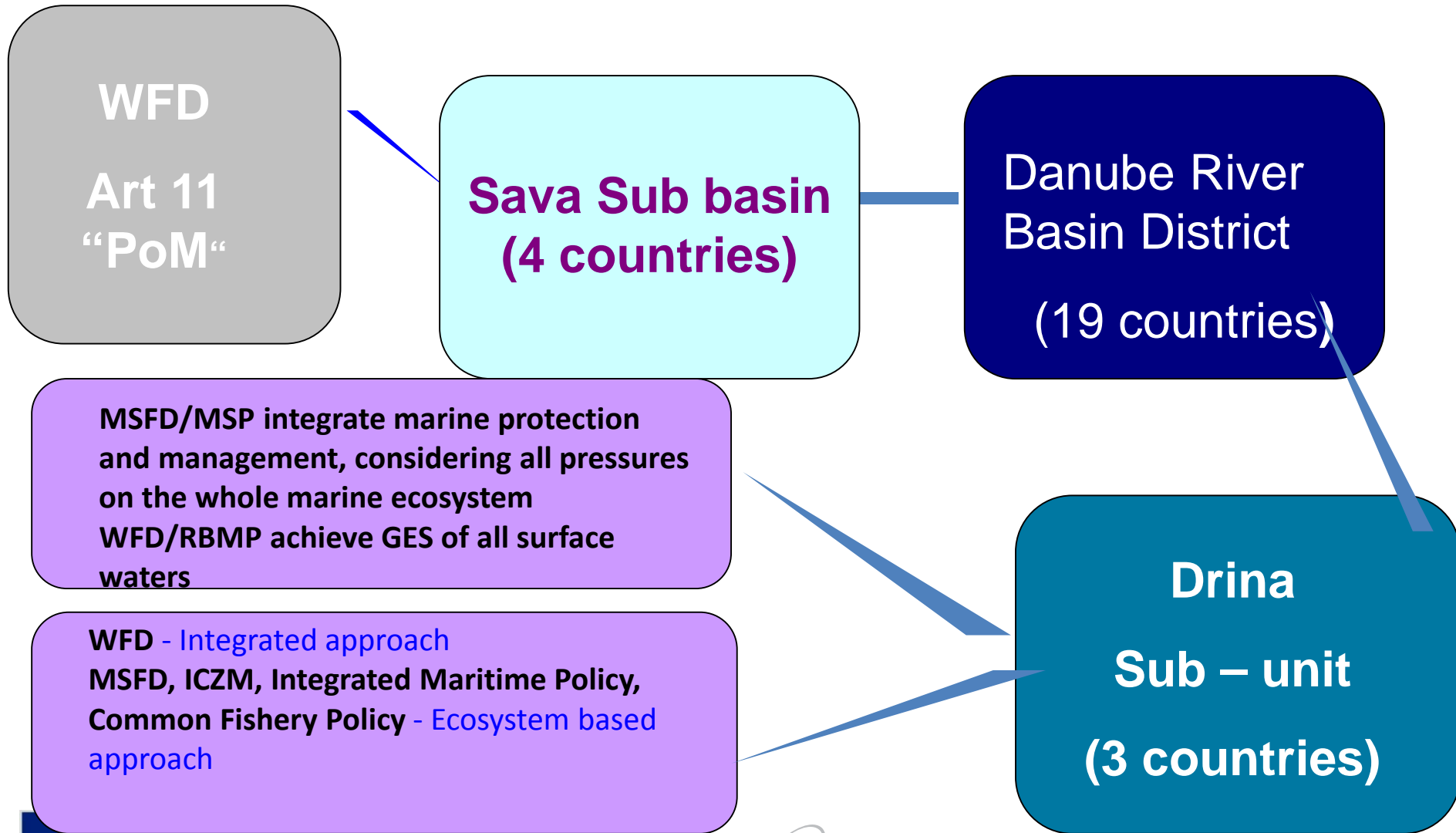


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# WFD/ RBM Plan vs MSFD/MSP



# Drina RBMP: interfaces with MSFD



# Marine Spatial Management Plan

**MSP: Strategic document that provides the framework and direction for marine spatial management decisions.**

- The spatial management plan guides the ecological, social, and economic development of the marine management area, including its airspace, surface area, water column, and submerged lands.
- The spatial management plan facilitates the ecological, social, and economic development of the marine management area, including its airspace, surface area, water column, and submerged lands.

The MSP components:

- (1) Identification of spatial management measures
- (2) Selection of criteria for the identification of marine spatial management measures
- (3) Developing the zoning plan
- (4) Evaluation of the spatial management plan
- (5) Approving the spatial management plan



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# MSP vs RBMP

## MSP

- Through MSP the integration of coastal watersheds and marine ecosystems is ensured
- MSP focuses on the human use of marine spaces and places

## RBMP

- It covers all water categories; rivers, lakes, groundwater as well as coastal and transitional waters
- Article 4.1 defines the WFD general objective to be achieved in all surface and groundwater bodies, i.e. good status by 2015

## Key elements

**The priorities, content, structure, level of detail**



# Drina PoM effects on the Black Sea (1)

The implementation of WFD and the MSFD should be are **closely inter-linked**, requiring:

- coordination of the related tasks and actions
- coordination of sector policies which are closely interlinked with the different Significant Water Management Issues of Drina RB (defined through screening templates), such as:

## **Prioritized identified SWMIs**

- 1.Organic pollution:** insufficient sewage and WWTPs coverage - **eutrophication at Black Sea**
- 2.Flooding**
- 3.Hydromorphological alterations:** hydropower energy facilities
- 4.Nutrient pollution:** diffuse pollution from agriculture – **eutrophication at Black Sea**
- 5.Priority and hazardous substances:** industrial emissions – **pollution of the Black Sea**

## **Additional SWMIs**

- 6.Sand and gravel extraction
- 7.Damp site used as municipal landfill



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# Drina PoM effects on the Black Sea (2)

The PoM of Drina RB will include measures addressing SWMIs

**SWMI organic pollution** for the improvement of the UWW and industrial sector by upgrading or constructing sewer systems and waste water treatment plants as well as introducing BAT at the main industrial facilities.

**SWMI Nutrient pollution** – particularly by N and P - contribute to eutrophication in the Black Sea North-Western shelf.

Black Sea was significantly suffering from eutrophication and the receiving coastal areas have been designated as a sensitive area under the UWWTD- agglomerations with more than 10,000 PE in the EU MS have to be subject to tertiary treatment (nutrient removal) or a reduction of at least 75% in the overall load of total phosphorus and nitrogen entering all urban waste water treatment plants (of agglomerations > 2000 PE) has to be achieved.

For the Non EU MS More stringent treatment technology and the introduction of BAT recommendations which can significantly reduce industrial and agricultural point source nutrient pollution.



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# Drina PoM effects on the Black Sea (3)

**Nutrient pollution is a priority challenge,  
interlinking the freshwater with the marine environment**

The Drina PoM shall:

- include measures addressing nutrient pollution - Reduction of fertilizer and pesticides applied to agricultural lands
- contribute **to reduce marine pollution from land-based sources of pollution,** and
- **protect ecosystems in coastal and transitional waters of the Black Sea Region.**



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# Nutrient Pollution: Vision

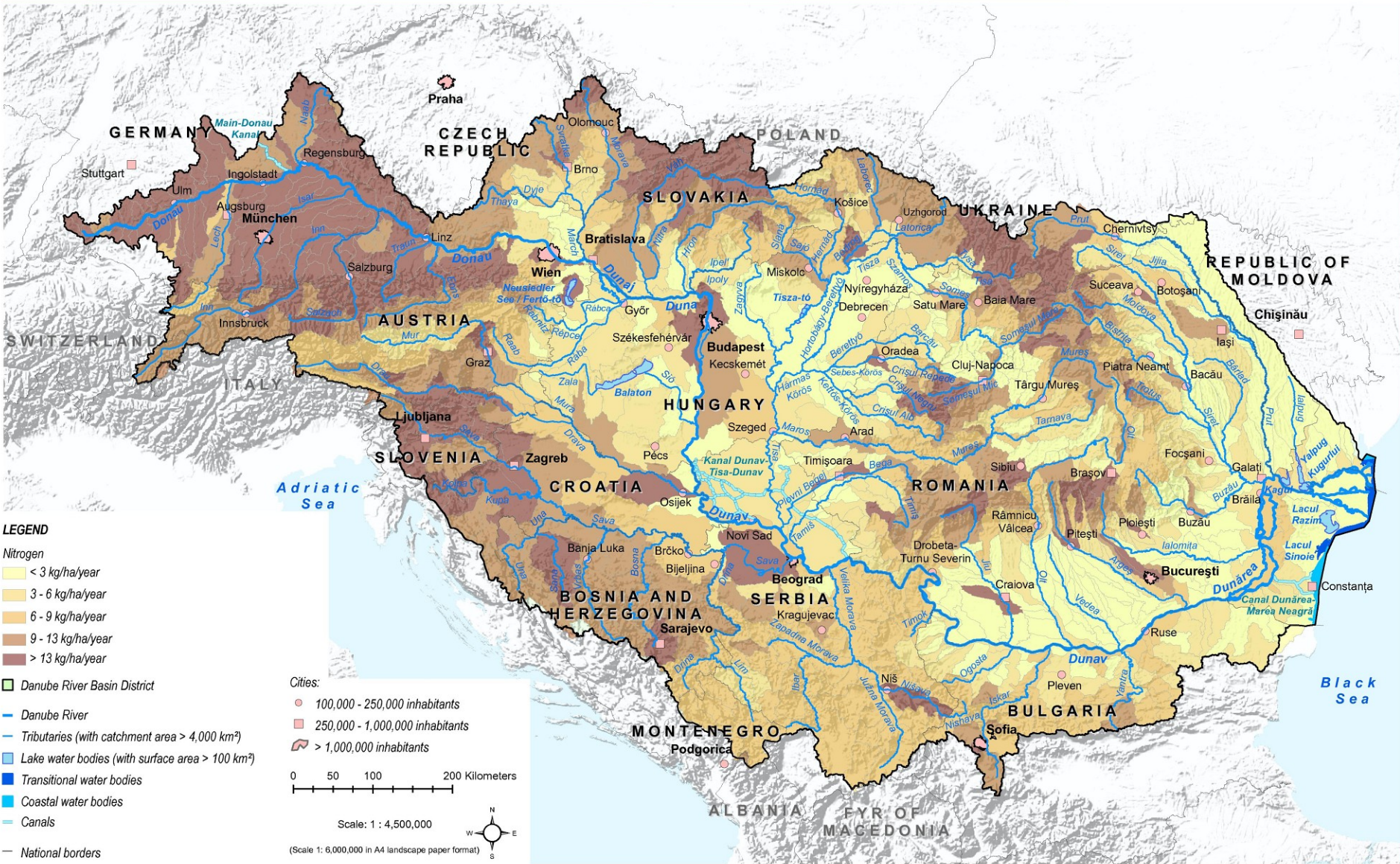
⇒ The nutrient balance in the DRB is environmentally sustainable. The emissions of nutrients via point and diffuse sources are managed in a balanced way for the entire DRB, that neither the waters of the DRB nor the Black Sea are threatened or impacted by eutrophication.



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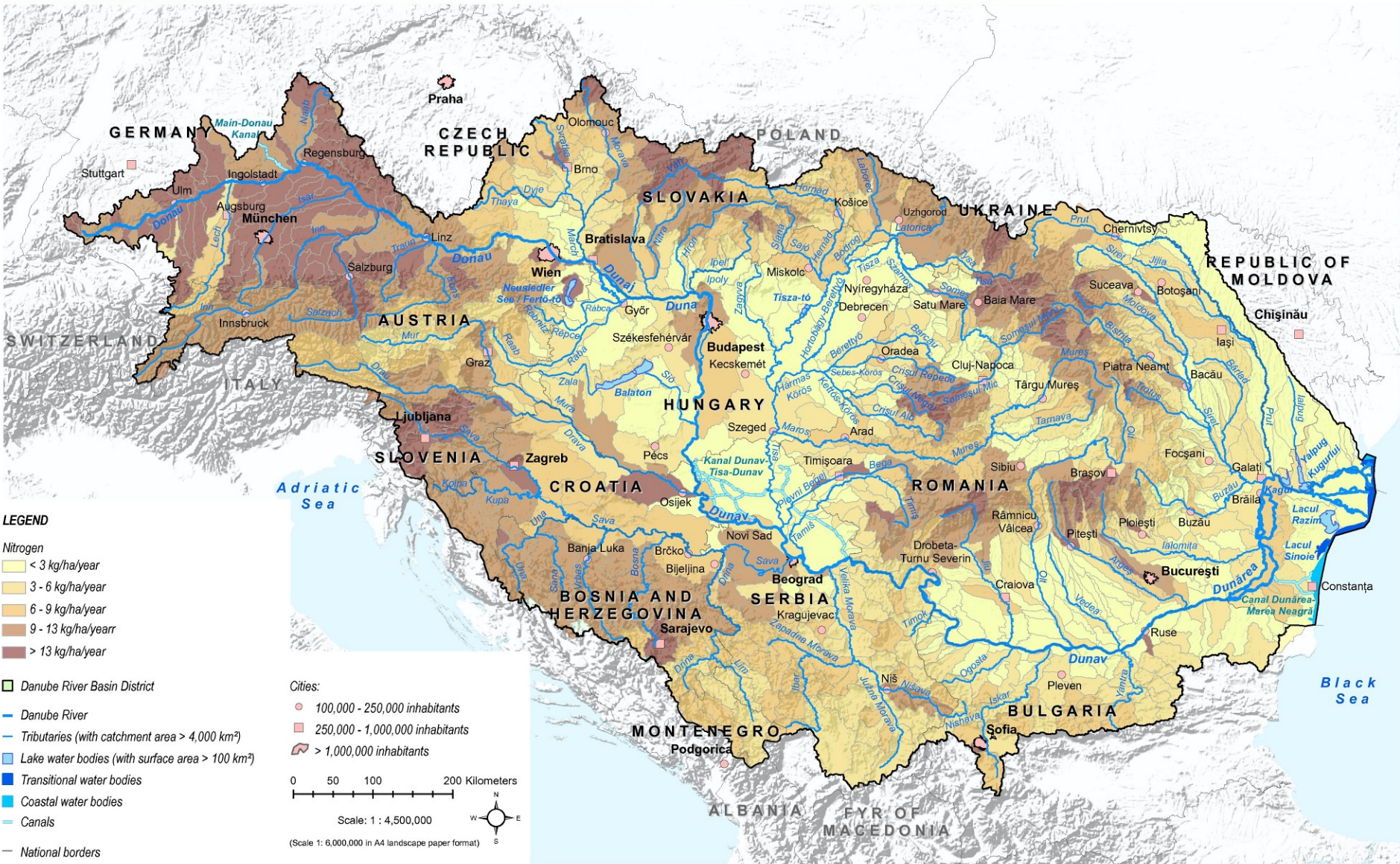
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Significant efforts have been undertaken so far in the DRBD regarding diffuse source pollution and its illustration using the MONERIS Model System (Behrendt et al., 2007). However, further research and monitoring is needed, as well as a continuous improvement and calibration of the MONERIS scenarios. The MONERIS Model integrates the findings of point source analysis with those related to diffuse sources and reflects the overall nutrient input in the DRB in total and per Danube country. SI is using a method based on the OECD method: Environmental indicators for agriculture, Methods and Results (2006).

This ICPRD product is based on national information provided by the Contracting Parties to the ICPRD (AT, BA, BG, CZ, DE, HR, HU, MD, RO, RS, SI, SK, UA) and CH, except for the following: EuroGlobalMap v2.1 from EuroGeographics was used for national borders of AT, CZ, DE, HR, HU, MD, RO, SI, SK and UA; ESRI data was used for national borders of AL, ME, MK; Shuttle Radar Topography Mission (SRTM) from USGS Seamless Data Distribution System was used as topographic layer; data from the European Commission (Joint Research Center) was used for the outer border of the DRBD of AL, IT, ME and PL.





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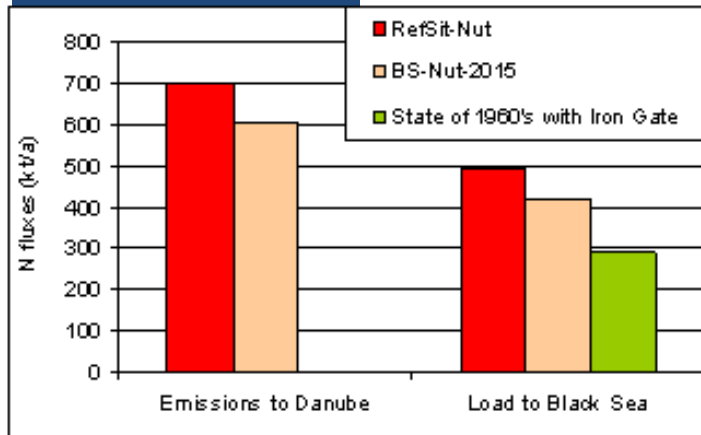
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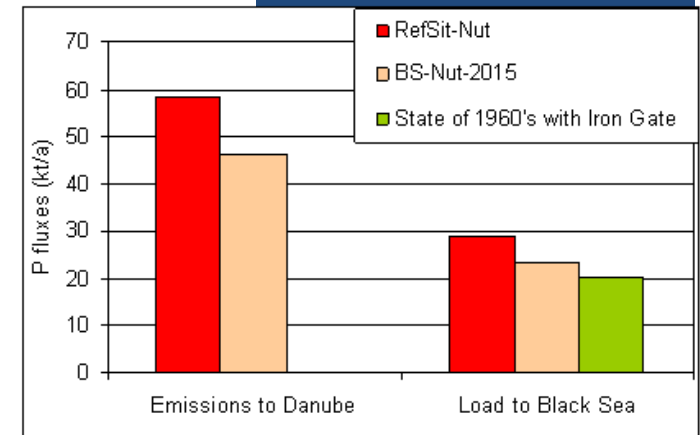


# 2010 Key Conclusions DRBMP: nutrients pollution reduction by 2015

## Nitrogen



## Phosphorous



- **Management objectives and EU WFD objectives not ensured**
- **N emissions** to surface waters in 2015: 12% lower. Loads to the Black Sea still far above (40%) the load of the 1960's.
- **P emissions** to surface waters in 2015: 25 % lower. Load to the Black Sea still above (15%) that of the 1960's



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**Introduction of Phosphate free detergents in the DRB**



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# Drina RB measures

MEASURES	EU WATER RELATED DIRECTIVES					
	WFD	MSFD	ND	FD	UWWTD	IED
Legislation, regulations	X	X	X	X	X	X
River Basin Management Plans	X			X		
Pollution reduction	X	X	X	X	X	X
Accidental pollution reduction	X	X	X	X		X
Infrastructure (UWWTP)	X	X		X	X	
Green Infrastructure	X	X	X	X		
Best practices	X	X	X	X		X
Economic, financial	X	X	X	X	X	X
Awareness, training	X	X	X	X	X	X





# What to do next...

- Definition of Drina River Basin vision and management objectives
- Prepare PoM in line with WFD and connect it with the PoM within MSFD, **involving landlocked countries**
- Assess the **anticipated effects toward reaching Black Sea targets**
- **Evaluate the impact of the River Basin Management plans on receiving marine water bodies and their ecosystems.**
- Support integrated and innovative approaches to governance and management from source to sea
- Improve coherence and integration in land, water, coastal and marine management
- Share knowledge on management of land, water, coastal and marine linkages
- Participate in **collaborative projects**, enabling freshwater, coastal and marine experts to connect and engage in promoting best practices, and take action to meet the objectives of both Directives.



# Thank you!



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