

Restoring Europe's Rivers The Danube

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International
Commission
for the Protection
of the Danube River

Internationale
Kommission
zum Schutz
der Donau

„Debating the challenge“ Boat Cruise on the Scheldt River



ICPDR

Wolfgang Stalzer

Brussels, 27th June 2013



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- ~9% Europe
- 81 M inhabitants
- 19 Countries

**Most
international
River Basin in the
World**

Political Background 1945 – 1990

Consequences for the International Danube River Basin Management

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1990 Fall of the Iron Curtain



Danube River Protection Convention



Goals

- Strengthen international cooperation
- Ensure sustainable water management
- Ensure conservation, improvement and rational use of surface waters and ground water
- Reduce inputs of nutrients and hazardous substances
- Control floods and ice hazards
- Reduce pollution loads of the Black Sea

Signed 29 June 1994, Sofia (Bulgaria)

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

Contracting Parties



Germany



Austria



Czech Republic



Slovakia



Hungary



Slovenia



Croatia



Bosnia & Herzegovina



Serbia



Montenegro



Romania



Bulgaria



Rep. of Moldova



Ukraine



European Union

Stakeholder Involvement: 22 Observers

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viadonau7



DANUBE PARKS
network of protected areas



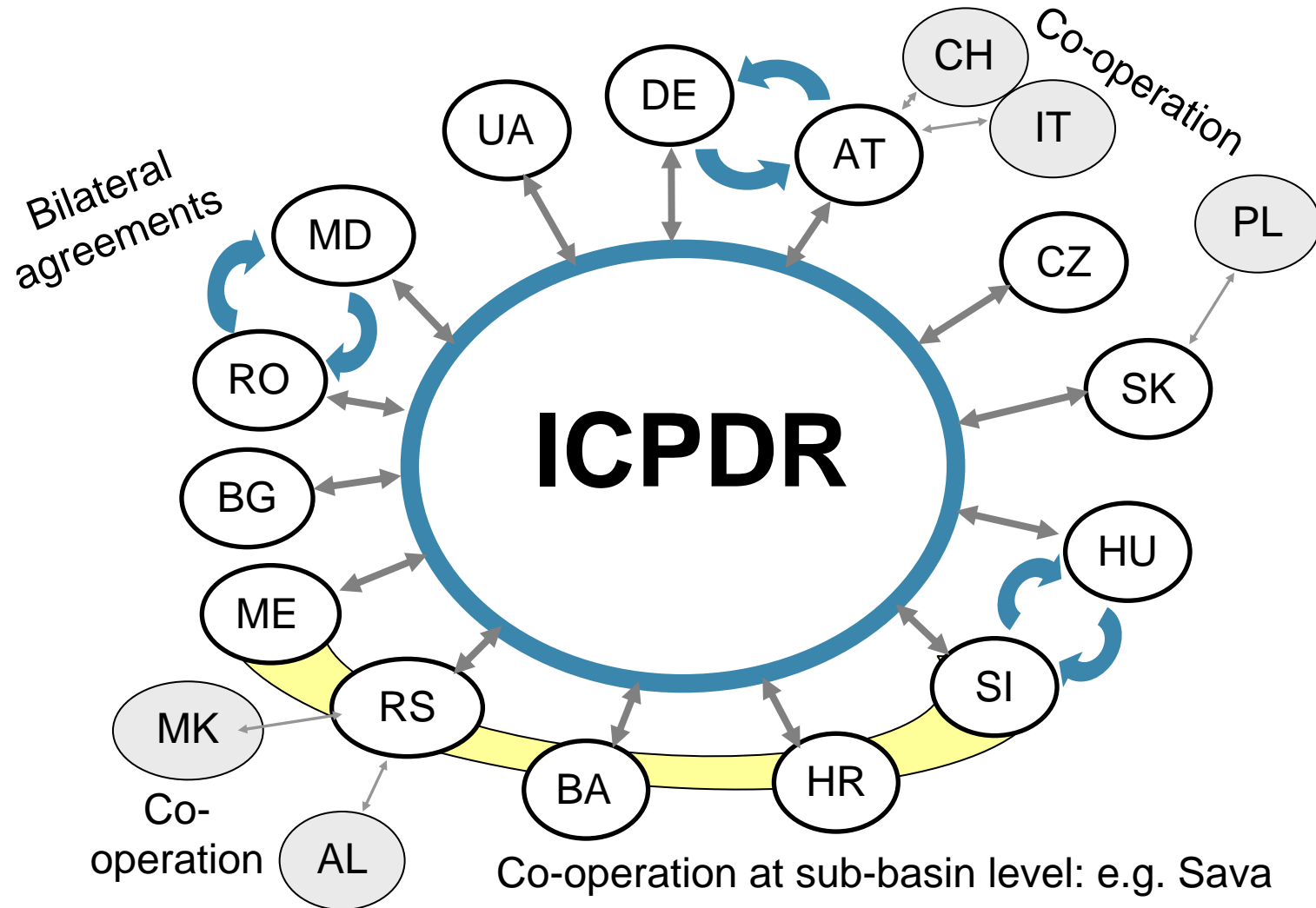
**Danube Tourist
Commission**

dcc | danube
competence
center

Coordination and Cooperation

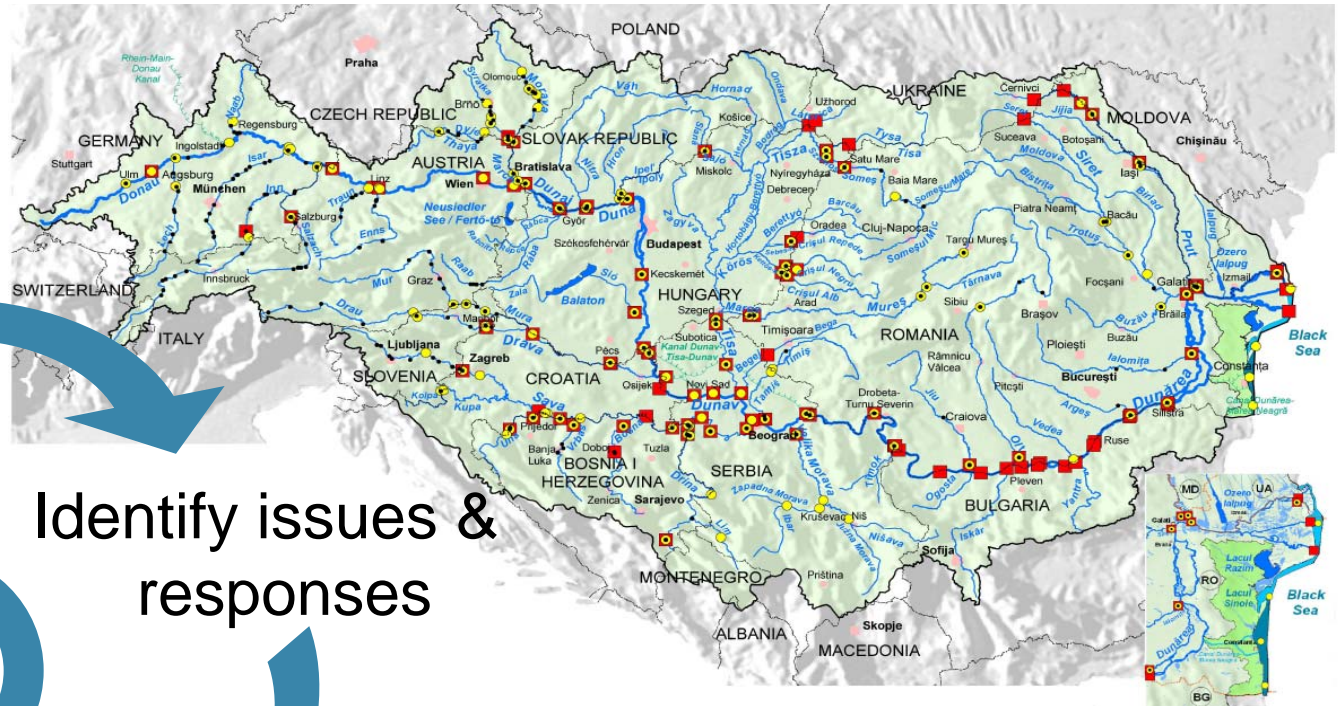
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TNMN: Monitoring Waters

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collect data

Identify issues &
responses

implement
measures

Significant Water Management Issues



Organic
Pollution



Nutrient
Pollution

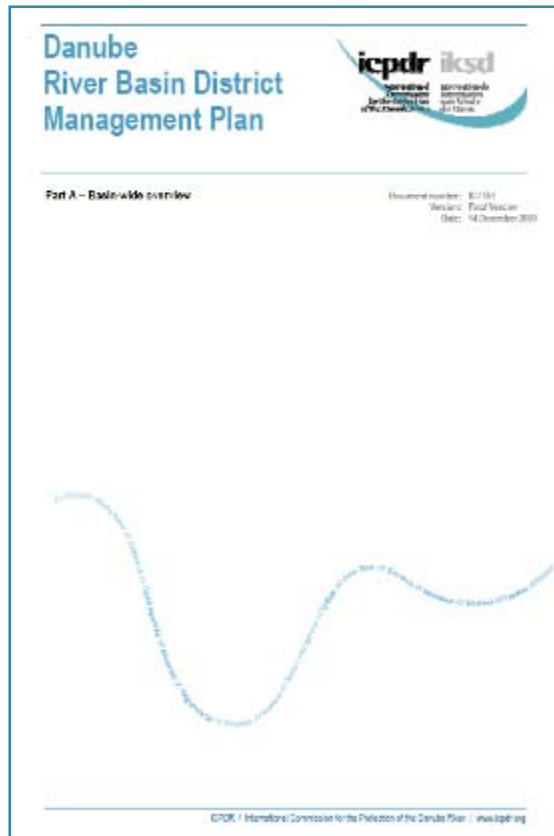


Hazardous
Substances Pollution



Hydromorphological
Alterations

DRBM Plan



Reflects/Includes

Impact of environmental issues (SWMIs)

Monitoring chemical & ecological status

Water use

Joint Program of Measures (JPM)

Flood Risk Management & Climate Change

Public Participation

Enables

Conclusions on funding

Evaluation of measure implementation

Organic Pollution



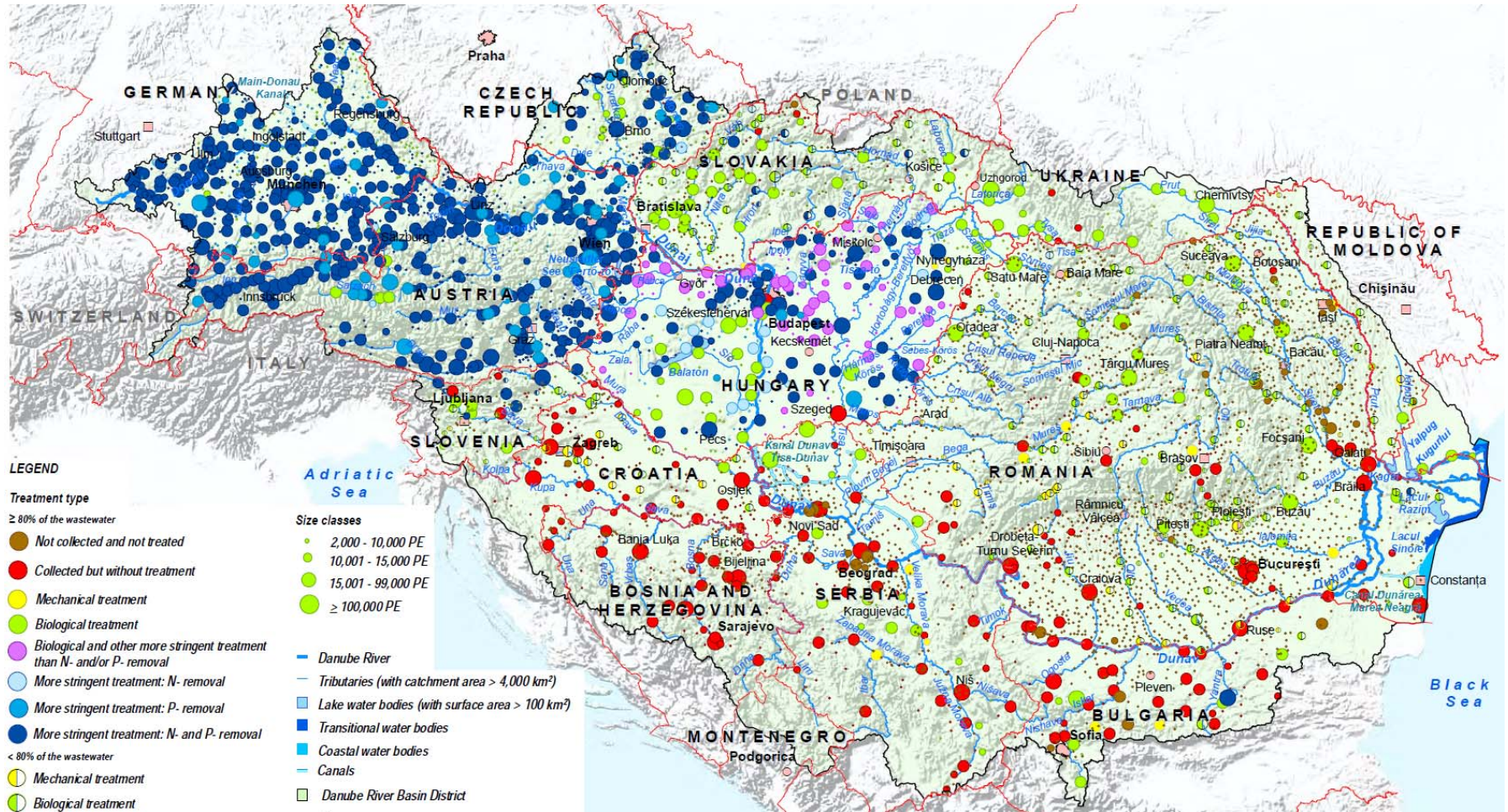
- Implementation UWWT Directive
- Implementation of Sewage Sludge Directive
- Implementation of Integrated Pollution Prevention Control Directive (IPPCD)
- BAT recommendations for industries

Urban Wastewater Treatment Plants - 2005

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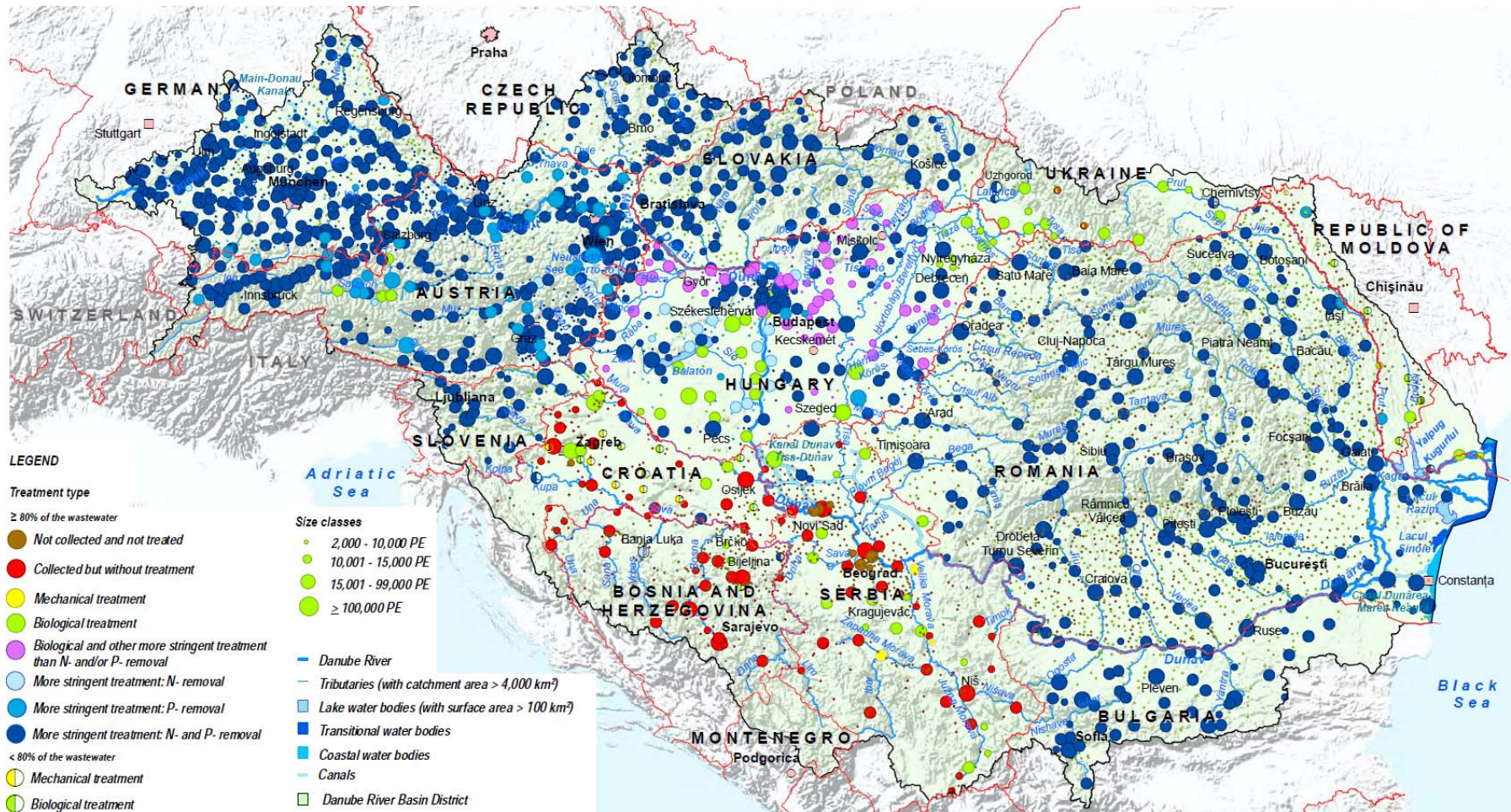


Urban Wastewater Treatment Plants - 2015

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Nutrient Pollution



- Implementation of UWWT Directive
- Implementation of Nitrates Directive
- Implementation of Best Agricultural Practice (BAP)
- Measures to control diffuse pollution
- Promote phosphate-free detergents EU wide
- July 2013 In laundry detergents (0.5 g/load) and
January 2017 In dishwasher detergents (0.3 g/load)

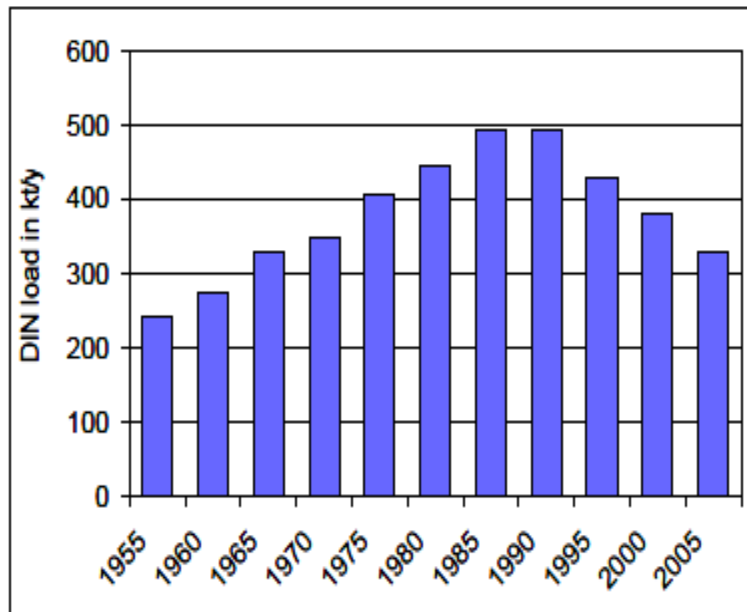
Nutrient Pollution Reduction

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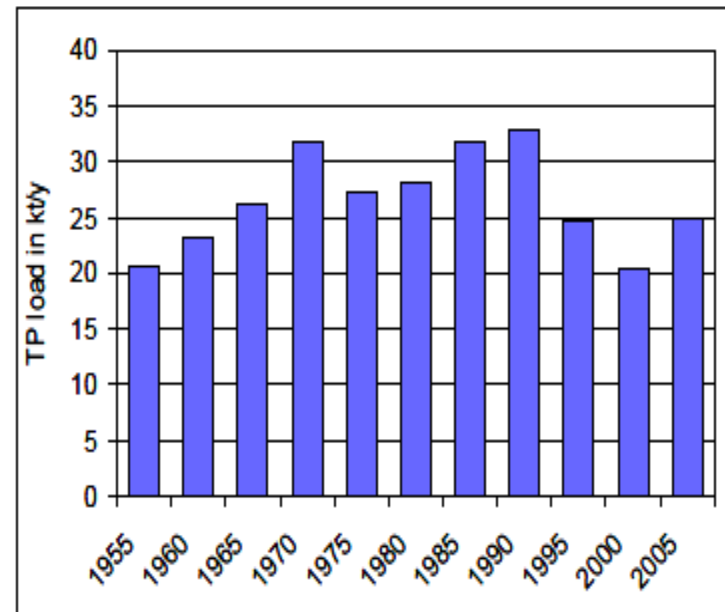
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Nutrient load at the mouth of the Danube – Development since 1955

Total Nitrogen



Total Phosphorus





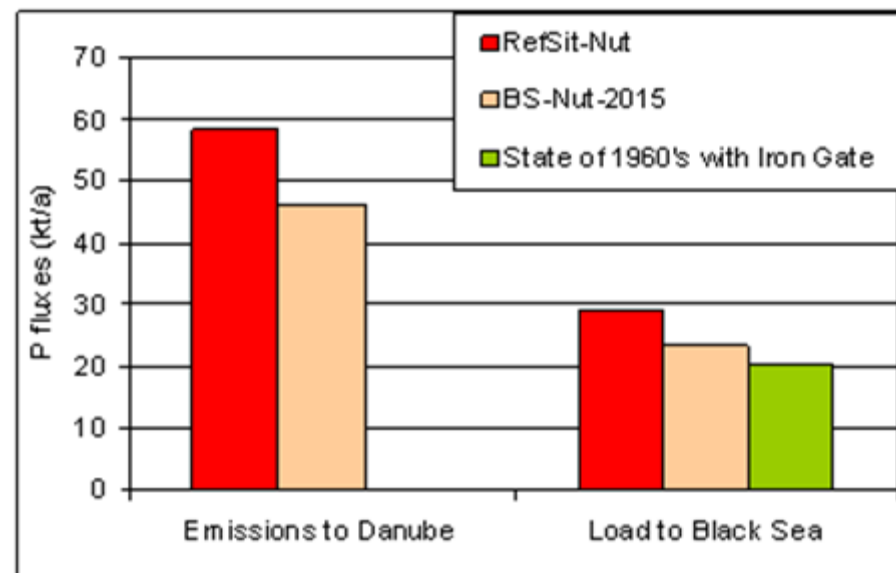
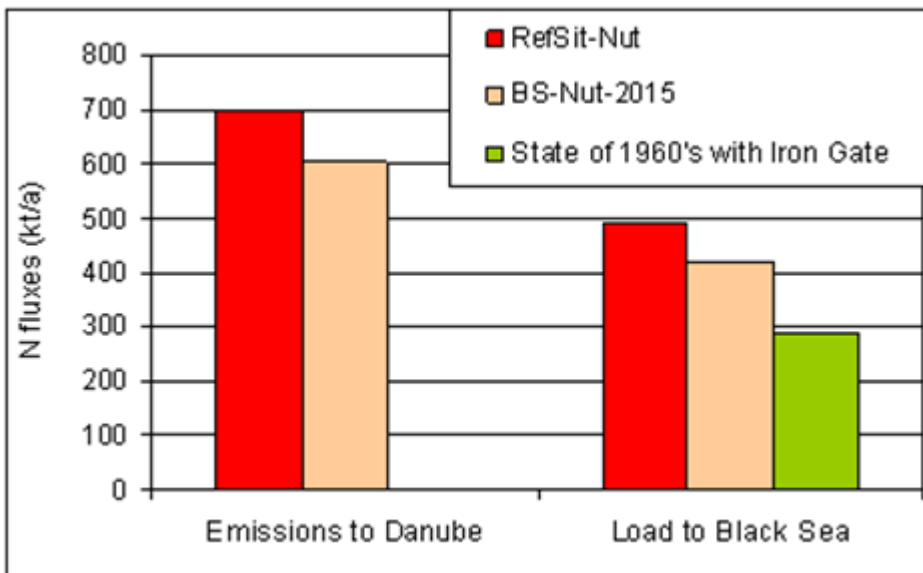
Nutrient
Pollution

Different Scenarios N & P Emissions and Loads Reference – Baseline 2015



Nitrogen
686 kt/a

Phosphorous
58 kt/a



Hazardous substance pollution



- Implementation UWWT Directive
- Measures regarding industrial sector
- Measures regarding agricultural sector (Best Environmental Practice)
- Improvement of monitoring regimes
- Priority projects for point sources (e.g. mining)

Reductions of agro-chemicals

- „Best Environmental Practice“ for pesticides
- Decoupling of EU Common Agricultural Policy
- Subsidies linked with environmental measures

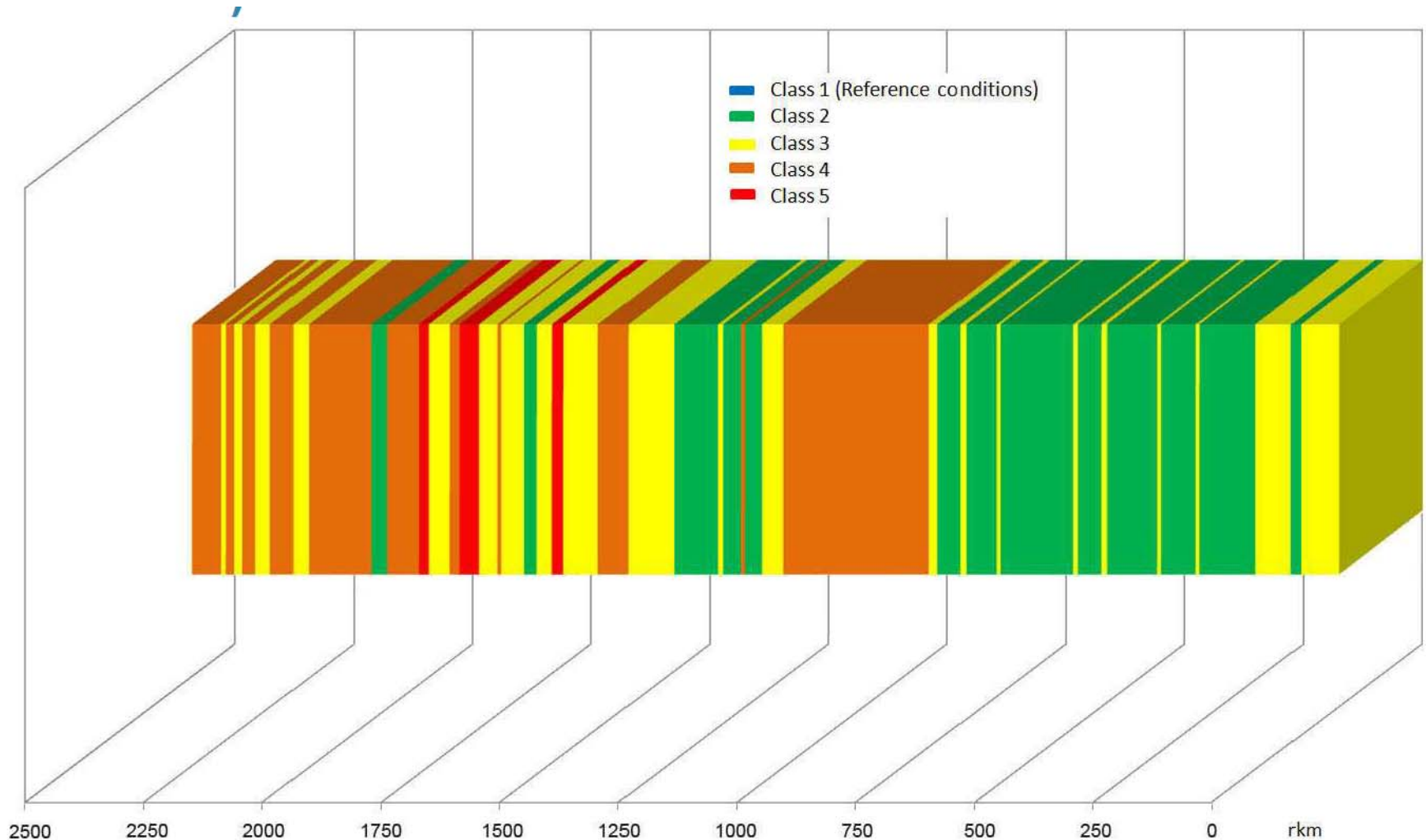


Hydromorphological assessment of the Danube

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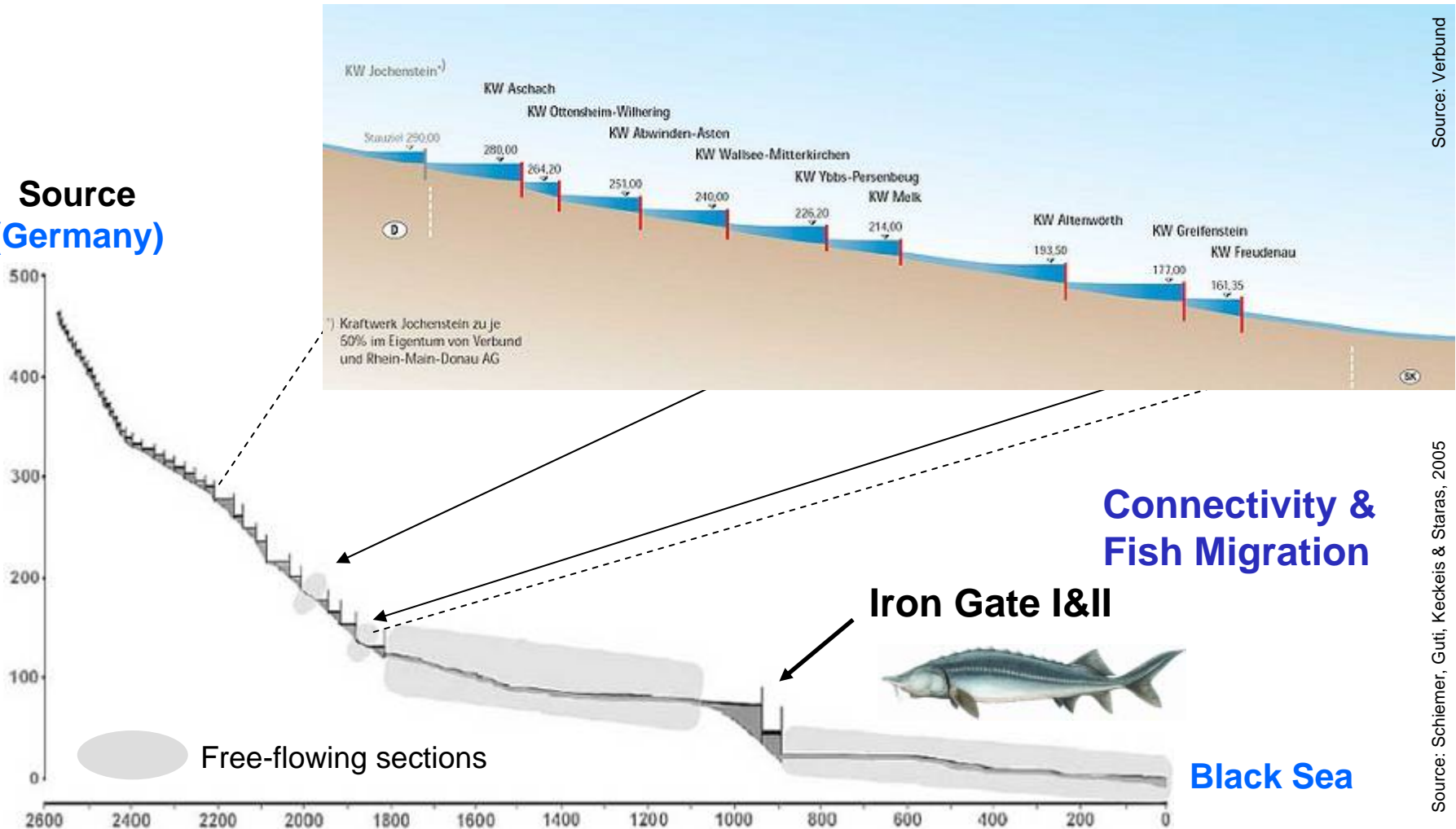
Danube River Hydropower Stations

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Source
(Germany)



Source: Verbund

Source: Schemer, Gut, Kockeis & Staras, 2005

Hydromorphological Alterations



- Reconnection of flood plains & wetlands
- Guidelines for inland navigation
- Guidelines for flood protection
- Dialogue with hydropower
- Habitat protection & fish migration aids

Flood Risk Management Sustainable Flood Protection



- Flood action plans for sub-basins
- Basin-wide report on flood monitoring
- FLOODRISK project
- Links RMB – FRM
- Hydrological Database

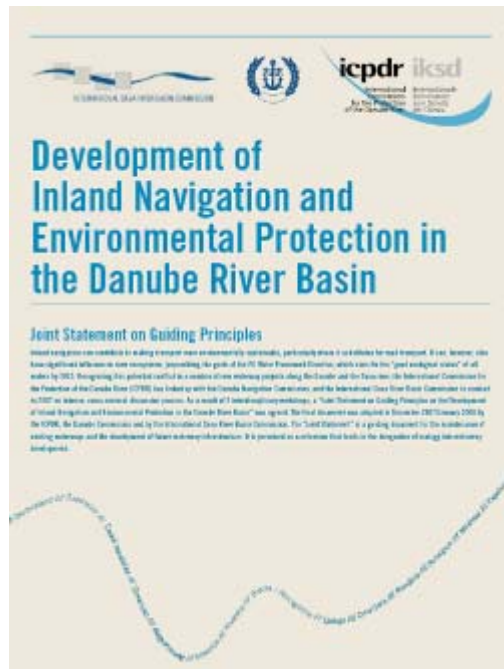
17 flood action plans for sub-basins
prepared in 2009

Flood Action Programs list hundreds
of measures

Implementation of
EU Floods Directive
EU FLOODRISK project



Inland Navigation



Investments and expected results



Investments:

» Municipal wastewater collection & treatment	3.709 bill USD
» Industrial waste water treatment	0.276 bill USD
» Agricultural projects and land use	0.113 bill USD
» Rehabilitation of wetlands	0.323 bill USD

Nitrogen reduction:

» from point sources	58,600 t/y
» from diffuse sources	60,000 t/y
» total emission reduction:	22 %

Phosphorus reduction:

» from point sources	12,000 t/y
» from diffuse sources	4,000 t/y
» total emission reduction	33 %

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Public Participation and Information

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Danube Day (Poster, Sticker, T-shirt, etc.) 29 June

Danube Watch

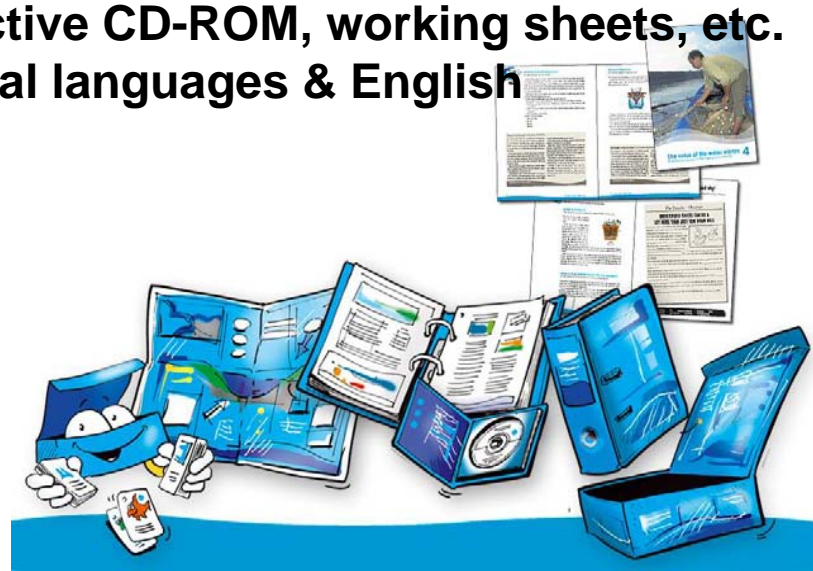
Danube Box – the Education Box



Teacher's handbook

Interactive CD-ROM, working sheets, etc.

National languages & English



Reasons for the Success



Break down of the old administration (iron curtain)

Setting up Donor driven Environmental Activities parallel to legal considerations

Development of the EU Water Policy and their implementation in all Danubien Countries

Intended Membership to the EU

Political Commitment for Cooperation



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Ministerial Meeting 2010

DANUBE DECLARATION

adopted at the Ministerial Meeting, February 16, 2010

DANUBE BASIN:
SHARED WATERS –
JOINT RESPONSIBILITIES



Guiding the way forward on
water management and the
implementation of the WFD in
the Danube River Basin



River Bank Restoration

Pilot Project Thurnhaufen



BEST LIFE Nature
Project 2007-2008



AWARD

Best LIFE-Nature Project



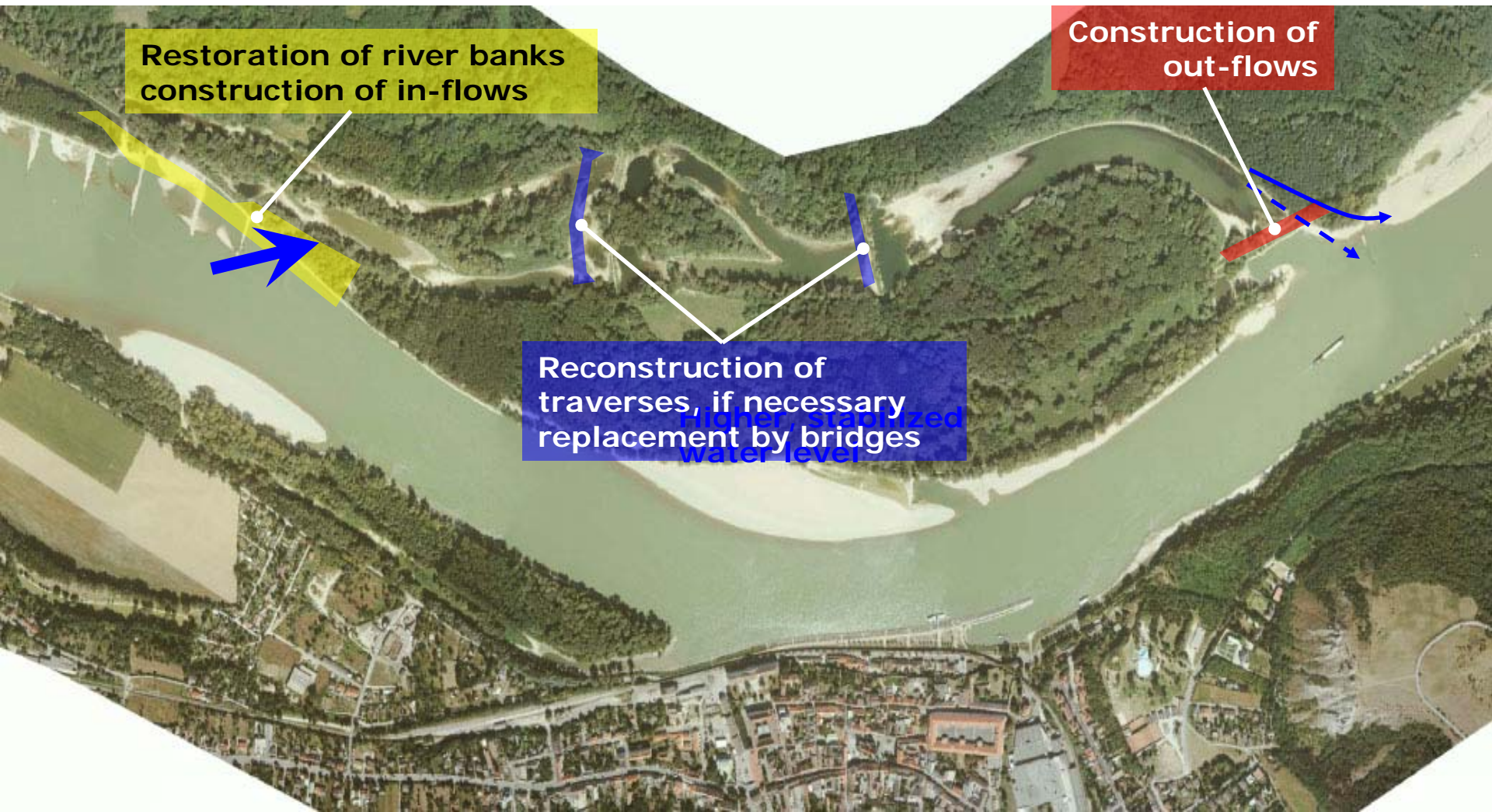
<http://ec.europa.eu/life>



Reconnection of Side Arms

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Danube - Wetlandrestoration



Wetland - Interconnection



Verkläusen von Durchlässen

Neue Bauweise GV
Schönau



River Bank Restoration

Pilot Project Witzelsdorf



after MW+1,15

Drau-Kleblach, Floodprotection – Bedenlargement



1999



2009

Riverbederosion – Bedenlargement Austria Drau Sachsenburg



KÄRNTEN
WASSERWIRTSCHAFT

icp



lebensministerium.at



1998



2002

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Flood Protection: Action programme & plans

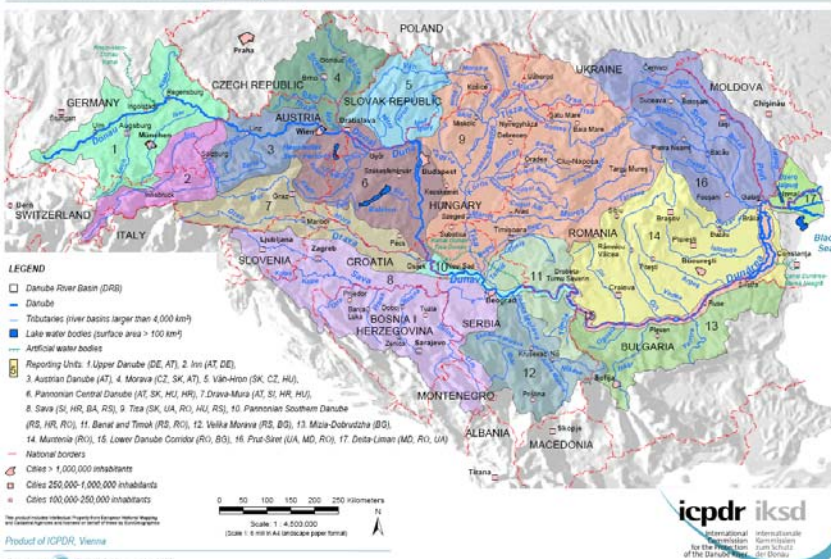
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Danube Flood Protection Reporting Units



Action Programme on Sustainable Flood Protection in the Danube River Basin adopted in 2004;

17 flood action plans for the sub-basins in the Danube catchment area prepared in 2009 based on 45 national plans;

FAP lists hundreds of measures the Danube countries are going to take to keep their citizens safe against the flood danger.

**Awareness Raising, Education,
and Consultation**

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www.danubebox.org

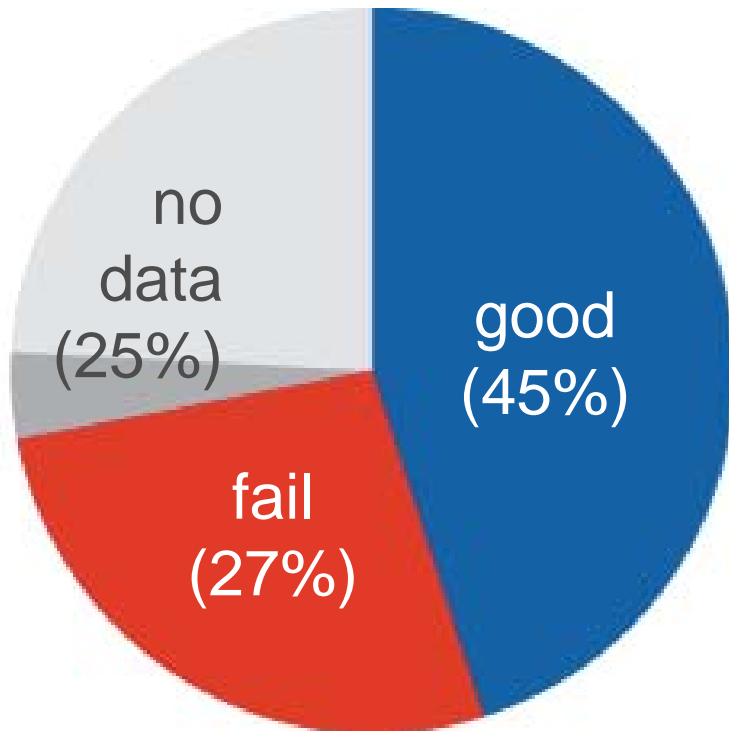


Next Steps

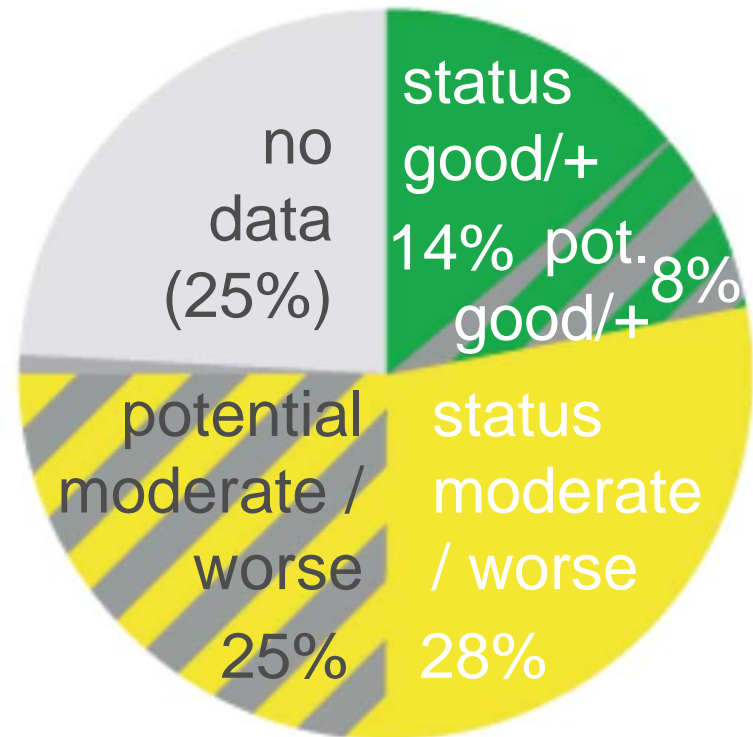


- ⇒ Implementation of joint measures according to the Danube River Basin Management Plan
 - by 2012
- ⇒ Evaluation of the measure implementation success
 - by 2015
 - to achieve the basin-wide management objectives
- ⇒ Integration of Danube basin-wide findings into the overall EU context of the Danube Strategy

Condition of Danube & its Tributaries



Chemical



Ecological

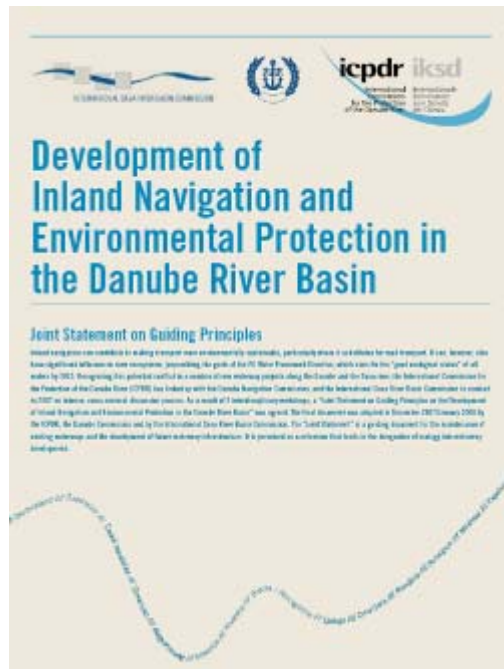
Risk Spot Inventory - Accident Emergency Warning System (AEWS)



Oct 2010: Red sludge spill results in
loss of human life & environmental
damage

AEWS alert for down-stream countries
Underlined importance of coordinated,
international warning systems

Inland Navigation



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EU FLOODRISK project