

EC project on Integration of Natural Water Retention Measures in river basin management

The 1st Danube Region Workshop, 28-29 January 2014
REC Conference Centre, Szentendre (HU)



Linking to the CIS process in the Danube River Basin

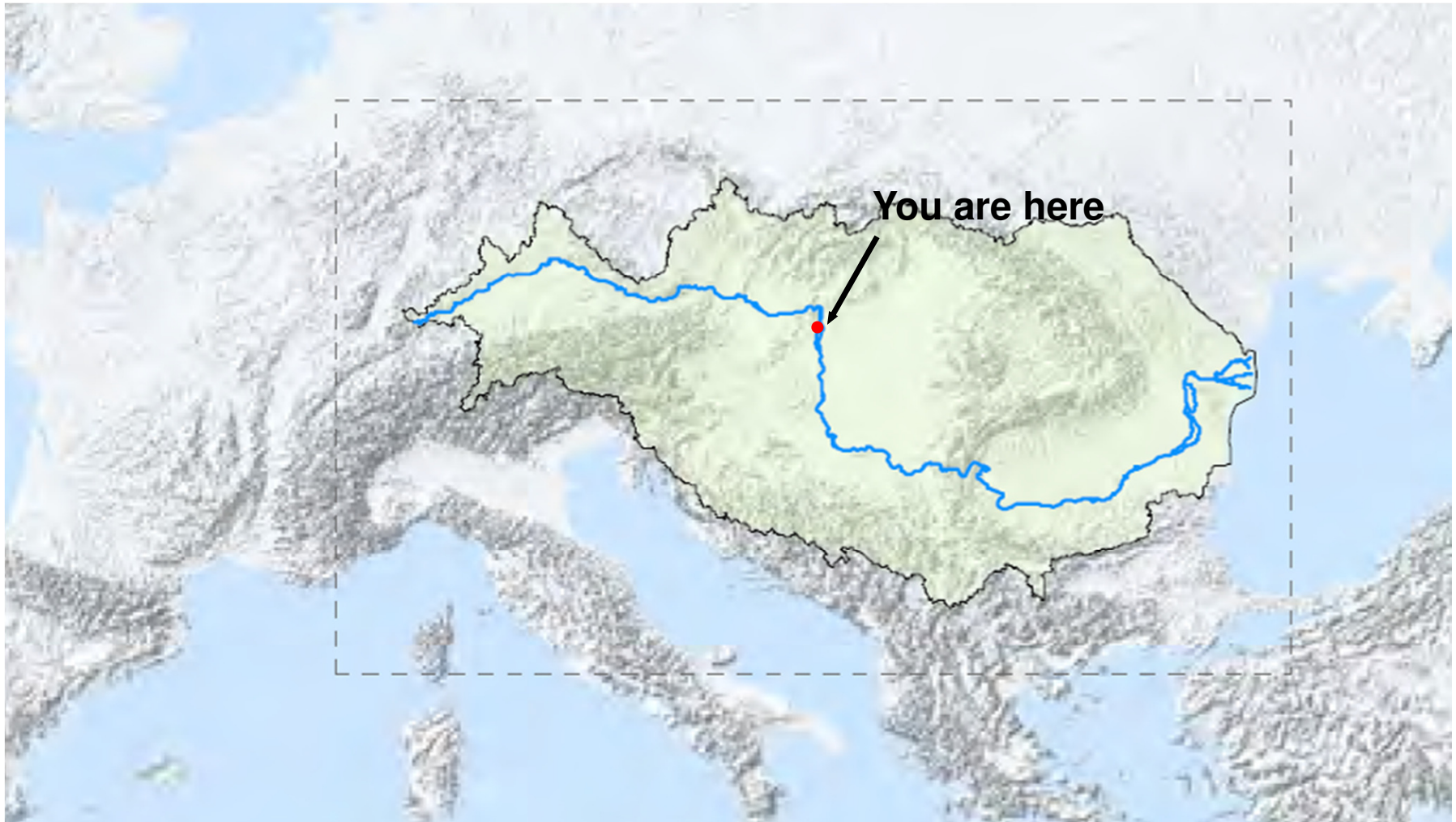


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The Danube River Basin



Catchment Area: 800.000 km² | 80 Mio. People | 19 Countries | Most international River Basin in the World

ICPDR

Contracting Parties



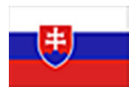
Germany



Austria



Czech Republic



Slovakia



Hungary



Slovenia



Croatia



Bosnia & Herzegovina



Serbia



Montenegro



Romania



Bulgaria



Rep. of Moldova



Ukraine



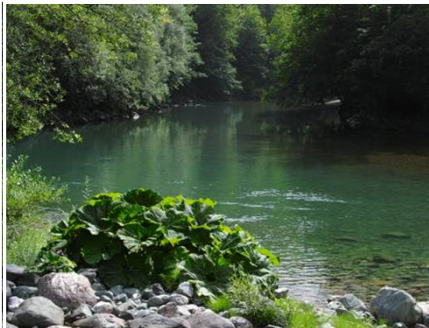
European Union

- **EU Member States (9)**
- **Non-EU Member States (5)**

Danube River Protection Convention

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of the Danube River
Internationale
Kommission
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der Donau

signed 29 June 1994, Sofia (Bulgaria)



Protection of water & ecological resources



Sustainable use of water



Reduce nutrients & hazardous substances

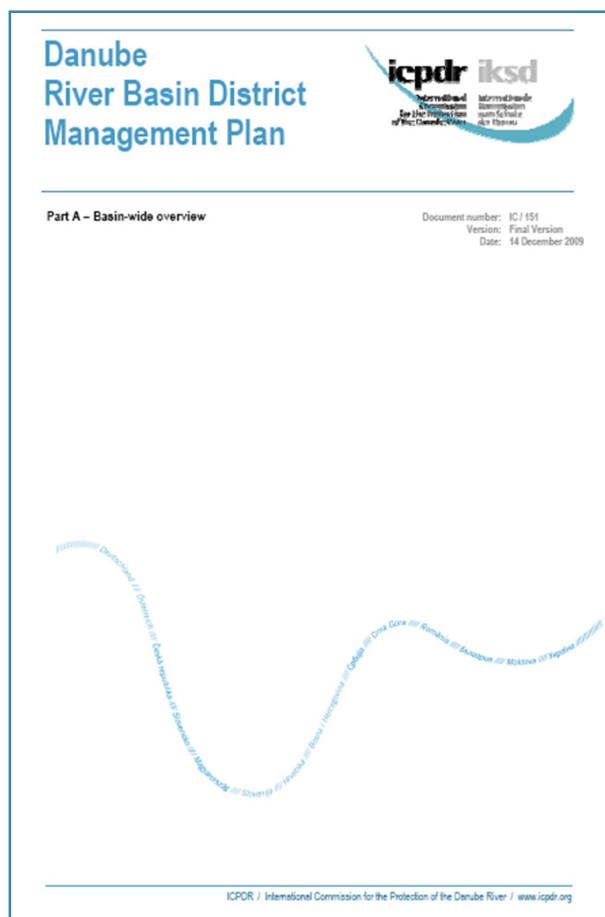


Manage floods & ice hazards



- **ICPDR coordinates implementation of EU Water Framework Directive & EU Floods Directive on basin-wide level**
- **Ensuring link to CIS process at EU level**

Danube River Basin Management Plan (adopted 2009)



Reflects

- Water status in the basin
- Significant Water Management Issues

Includes

- Joint Programme of Measures

Enables

- Conclusions on investment & funding
- Evaluation on measure implementation

Danube River Basin Significant Water Management Issues (SWMIs)



Organic
Pollution



Nutrient
Pollution

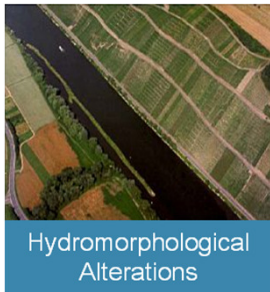


Hazardous
Substances Pollution



Hydromorphological
Alterations

- SWMIs are key pressures in need to be addressed on basin-wide level
- Updated SWMI Paper currently under 6 months public consultation
- SWMIs to be maintained for 2nd DRBM Plan



Hydromorphological alterations

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River and Habitat Continuity Interruptions

Disconnection of Adjacent Wetlands/Floodplains

Hydrological Alterations

Future Infrastructure Projects

- **Main drivers:** Flood protection, navigation, hydropower
- **Two-fold challenge:**
 - 1) Mitigation measures for already **existing pressures**
 - 2) Ensuring sustainability of possible **future infrastructure**

Danube River Basin Management Plan Visions



Disconnection of adjacent floodplains / wetlands

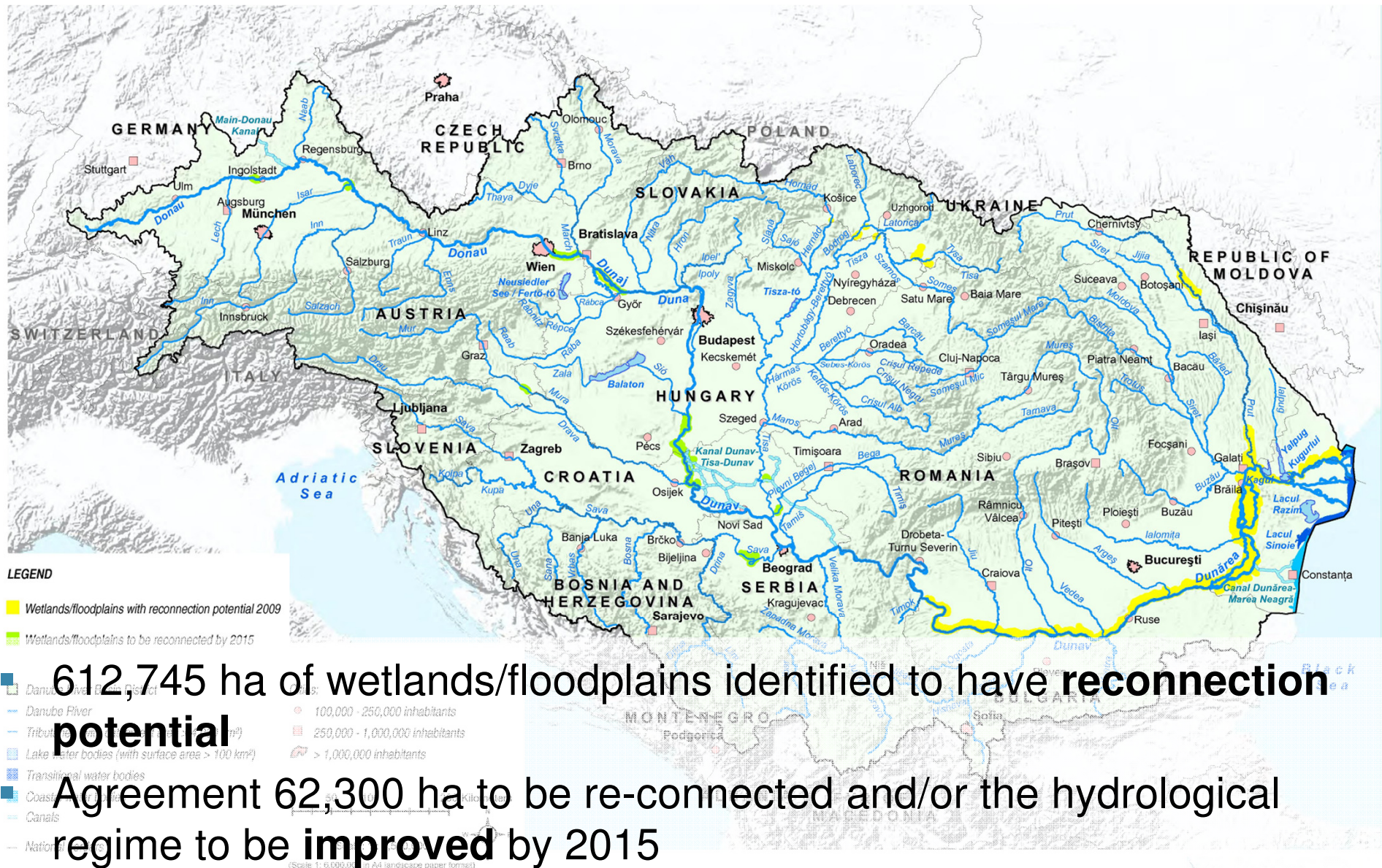
The ICPDR's basin-wide vision is that floodplains/wetlands in the entire DRBD are re-connected and restored. The integrated function of these riverine systems ensure the development of self-sustaining aquatic populations, flood protection and reduction of pollution in the DRBD.

Re-connecting Wetlands/Floodplains

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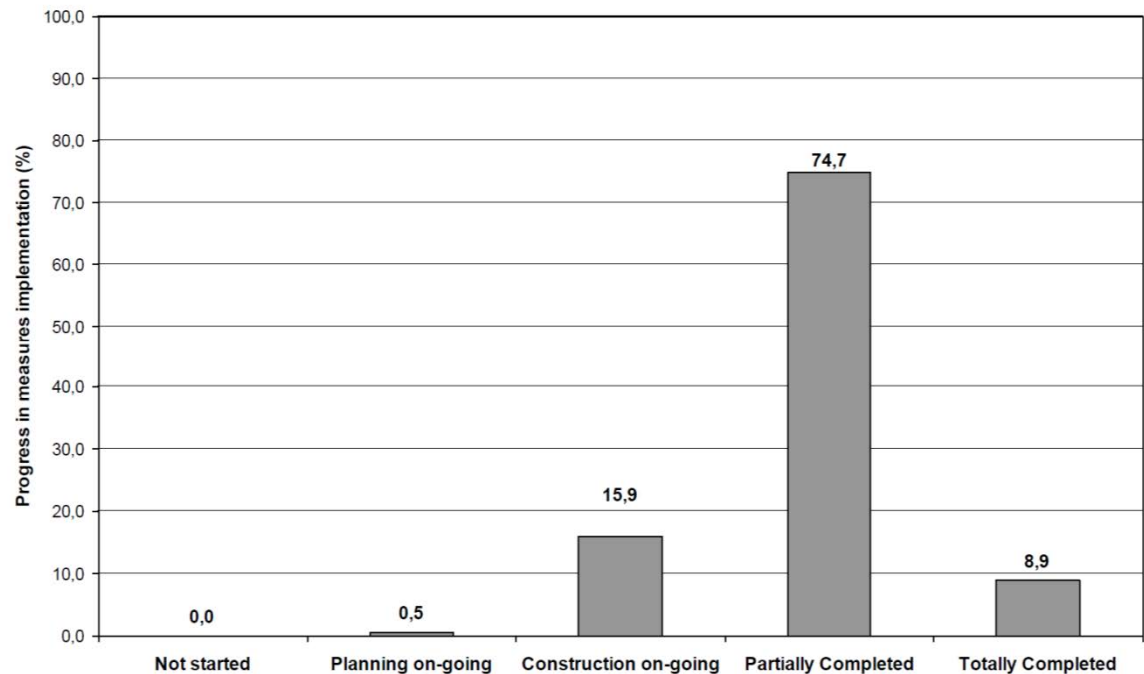
Addressing existing pressures Wetlands and Floodplains

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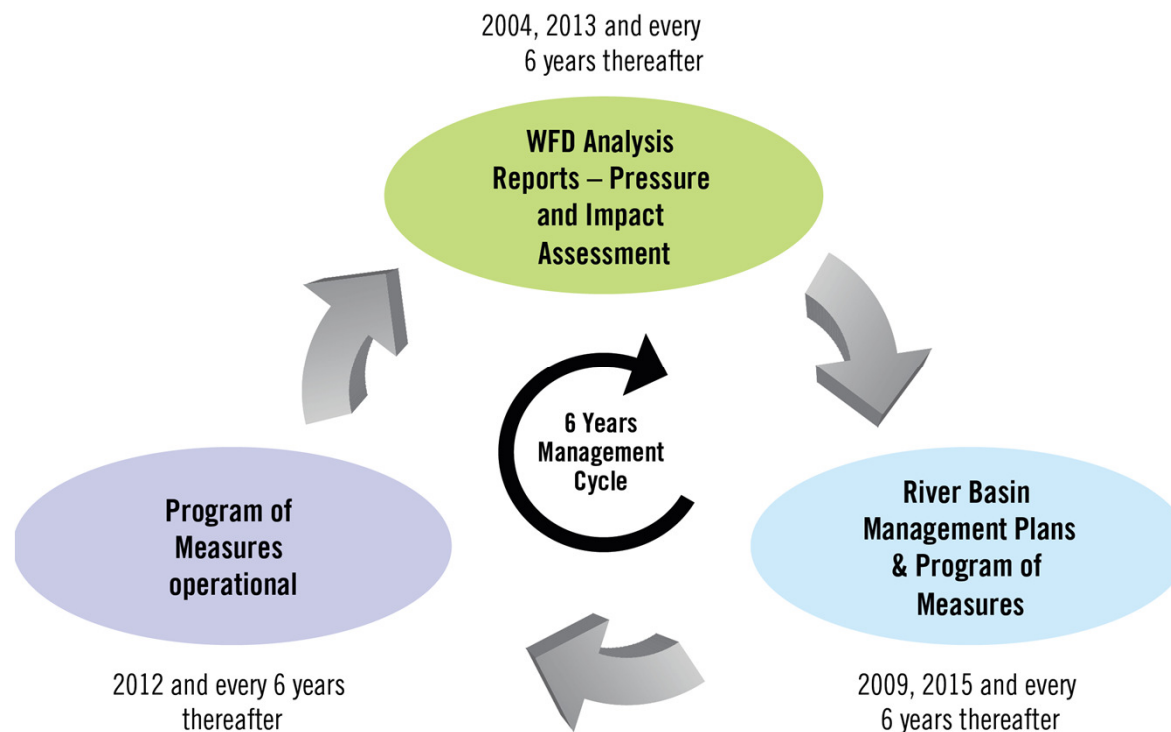
Re-connection of wetlands/floodplains

62,300 ha of wetlands/floodplains to be
reconnected by 2015



Implementation steps Water Framework Directive

Water Framework Directive



- December 2014: Draft 2nd DRBM Plan available
- January – June 2015: 6 months public consultation
- December 2015: Finalisation and adoption

Flood Risk Management

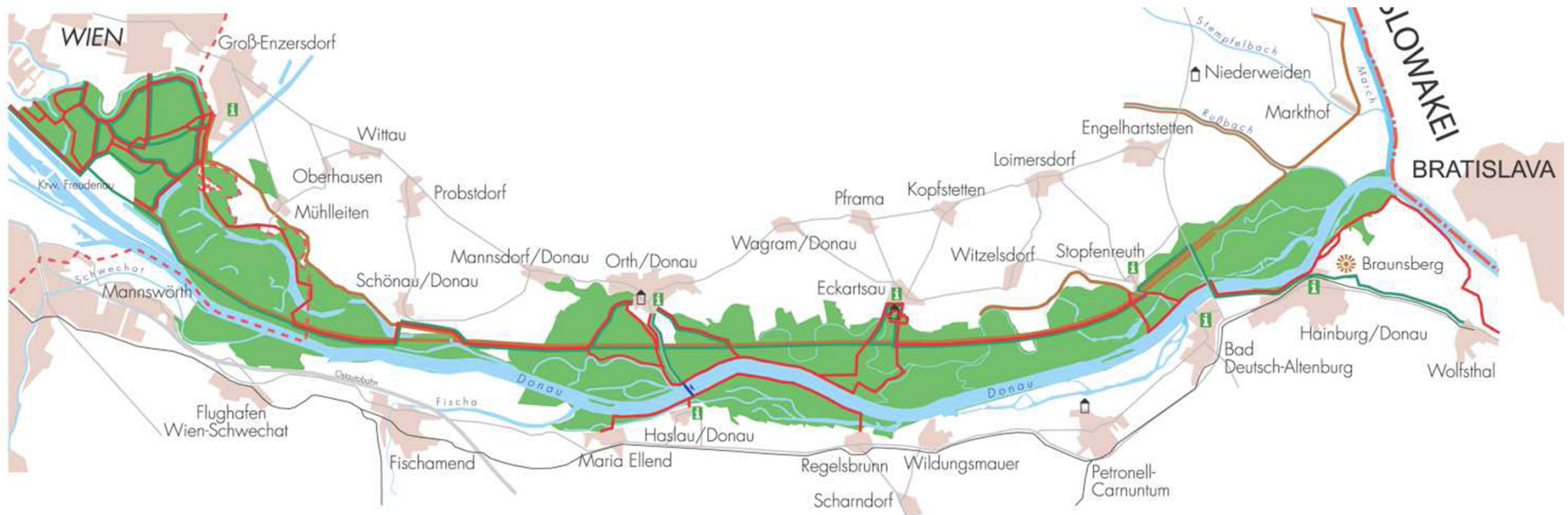
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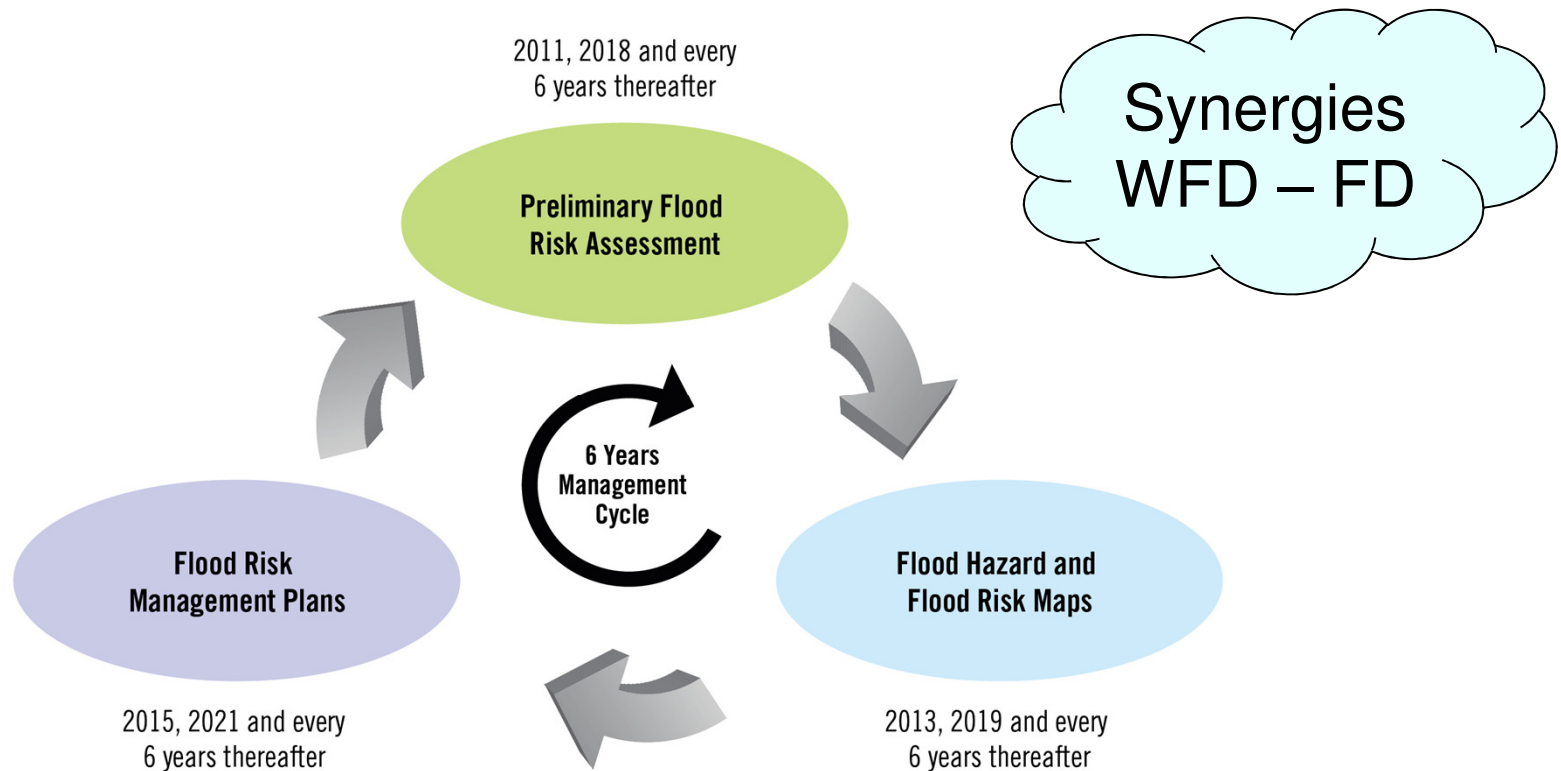
Danube floodplain National Park

646,000 Euros per year of cost benefits in terms of flood protection (Tishler 2011)



Implementation steps EU Floods Directive (FD)

EU Floods Directive



- December 2014: Draft 1st DFRM Plan
- January – June 2015: 6 months public consultation
- December 2015: Finalisation and adoption

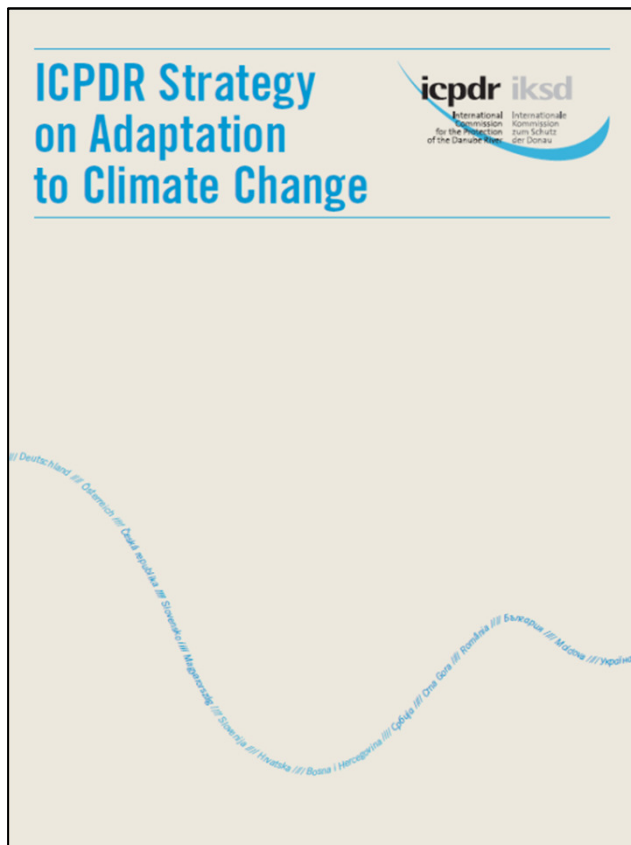
Natural Water Retention Measures

Multiple benefits

- Supportive element for „Good Status“ and WFD implementation
- Sustainable Flood Risk Management
- Nutrient reduction
- Groundwater recharge
- Protected areas and Natura 2000
- Water Scarcity and Drought
- Climate change adaptation
- ...



Adaptation to Climate Change



ICPDR Strategy on Adaptation to Climate Change

- Adopted in December 2012
- Currently under implementation
- Management Plans according to WFD and FD are main tools for taking adaptation measures
- Example for ecosystem-based climate adaptation measure → **Protection, restoration and expansion of water conservation and retention areas**



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

EU Blueprint on NWRMs

EU Blueprint to Safeguard Europe's Water Resources



Blueprint's proposed action	Who will take it?	By when?
Develop CIS Guidance on Natural Water Retention Measures (Green Infrastructure)	Commission, Member States & Stakeholders	2014
Green CAP pillar I to support Natural Water Retention Measures (through ecological focus areas)	Commission and Member States	As of 2014
Use Structural & Cohesion Funds & EIB loans to support Natural Water Retention Measures	Commission, EIB and Member States	2014-2021

Conclusions



- ICPDR is aware of potential multiple benefits of NWRM (good status, flood mitigation, Natura 2000, ...)
- Some measures already under implementation – floodplain/wetland reconnection
- Preparation of 2nd DRBM Plan and 1st DFRM Plan provide opportunity for further integration of NWRM
- Timelines Project – WFD & FD planning processes !?
- Exchange with experts in ICPDR Expert and Task Groups for practical feedback and linkage to planning processes
- Linkage with other projects, e.g. SEE River Project

Thank you for your kind attention!

For more information please consult the ICPDR website @ <http://www.icpdr.org>

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