

# RIVER RESTORATION AND GOOD ECOLOGICAL STATUS

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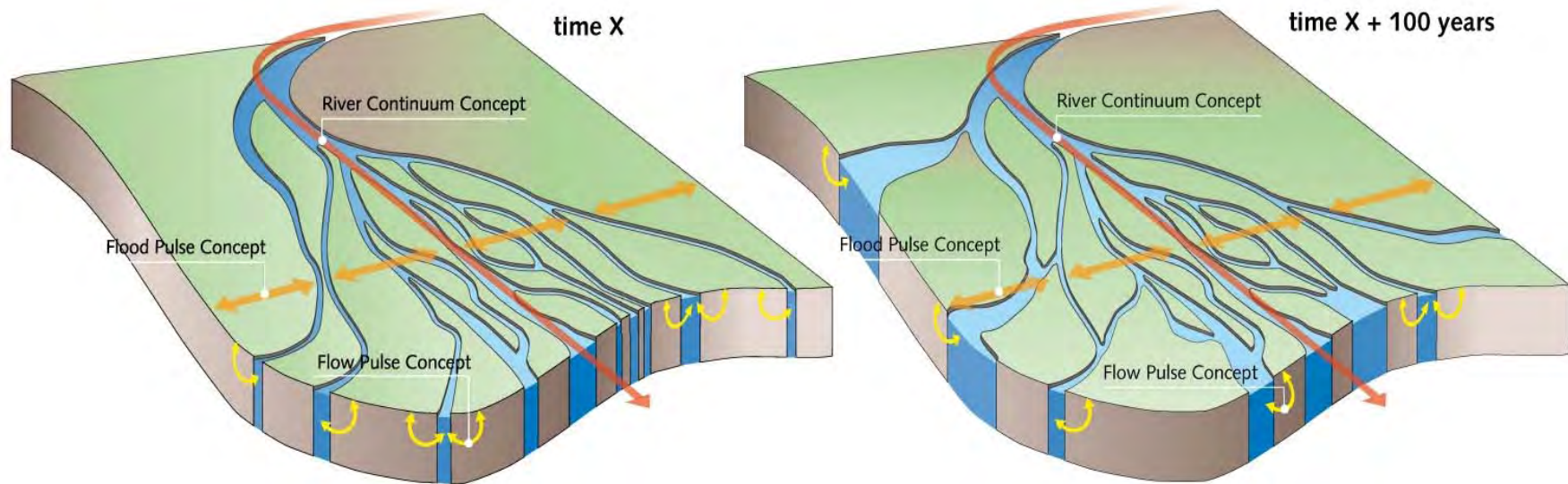
**Chairman European Centre for River Restoration**



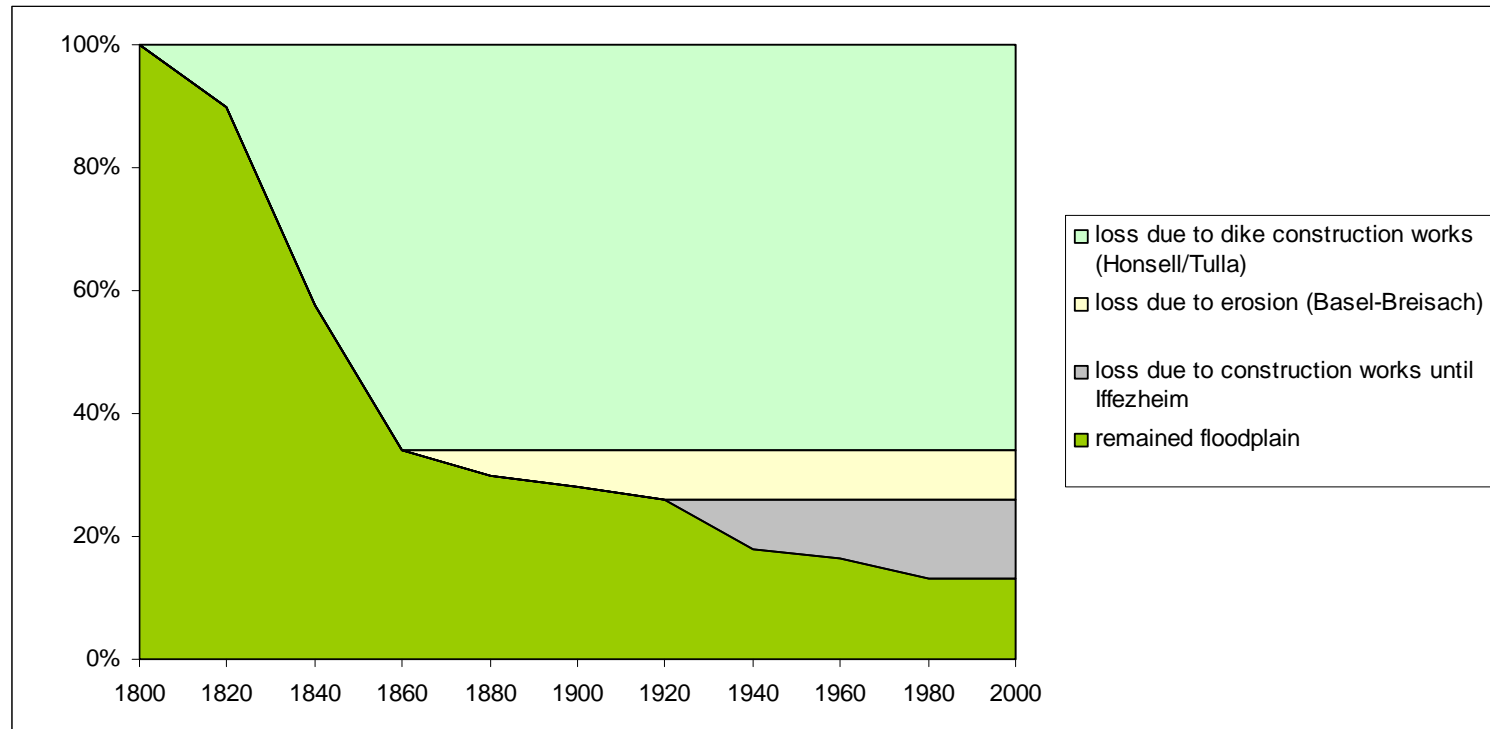
# HUMAN IMPACT ON RIVERS AND DELTA'S

- (Agricultural ) use floodplains – big loss in natural storage volume for floods
- Modification of rivers for flood protection and navigation
- Dams for hydropower generation
- Water exploitation (abstraction) by economic sectors
- **Loss of natural (hydro-morphologic) processes**
- **Habitat loss and fragmentation**

# CHANGES IN THE NATURAL ENVIRONMENT OF A RIVER



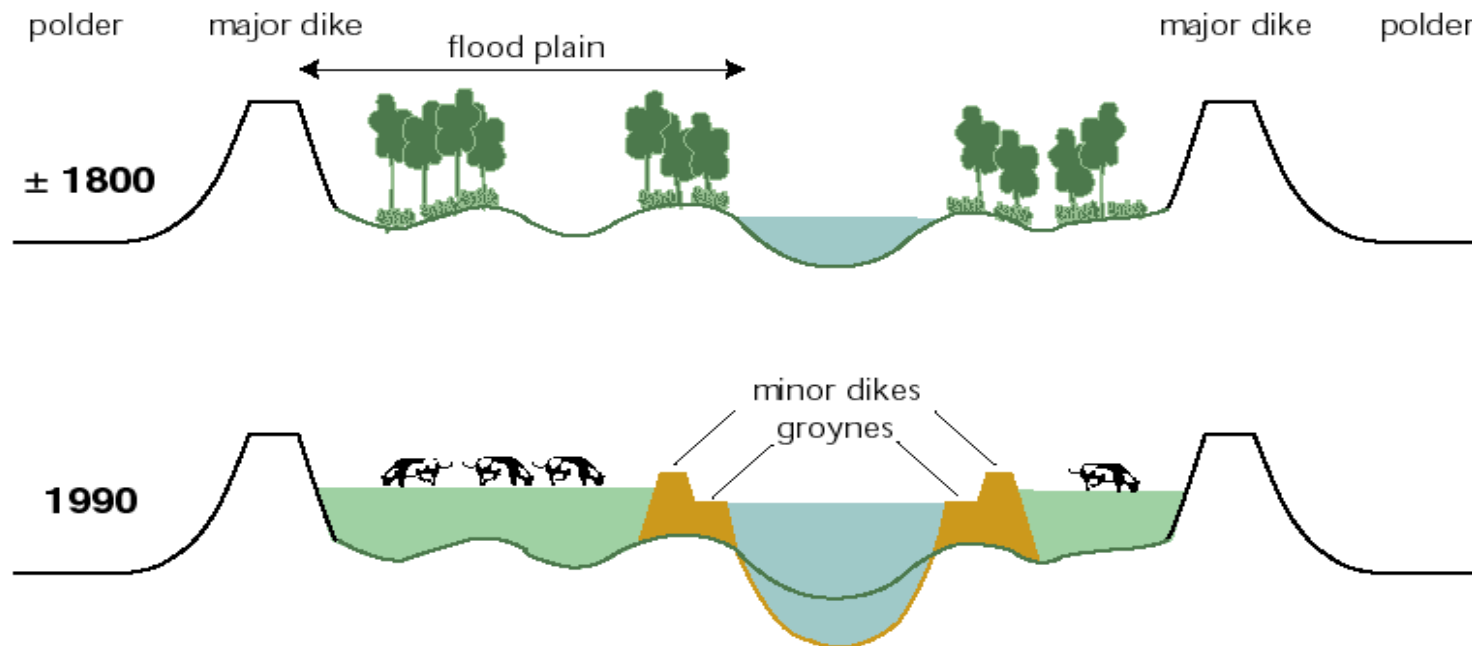
# LOSS OF FLOODPLAIN SURFACE IN UPPER RHINE



# DEVELOPMENT OF THE FLOODPLAIN



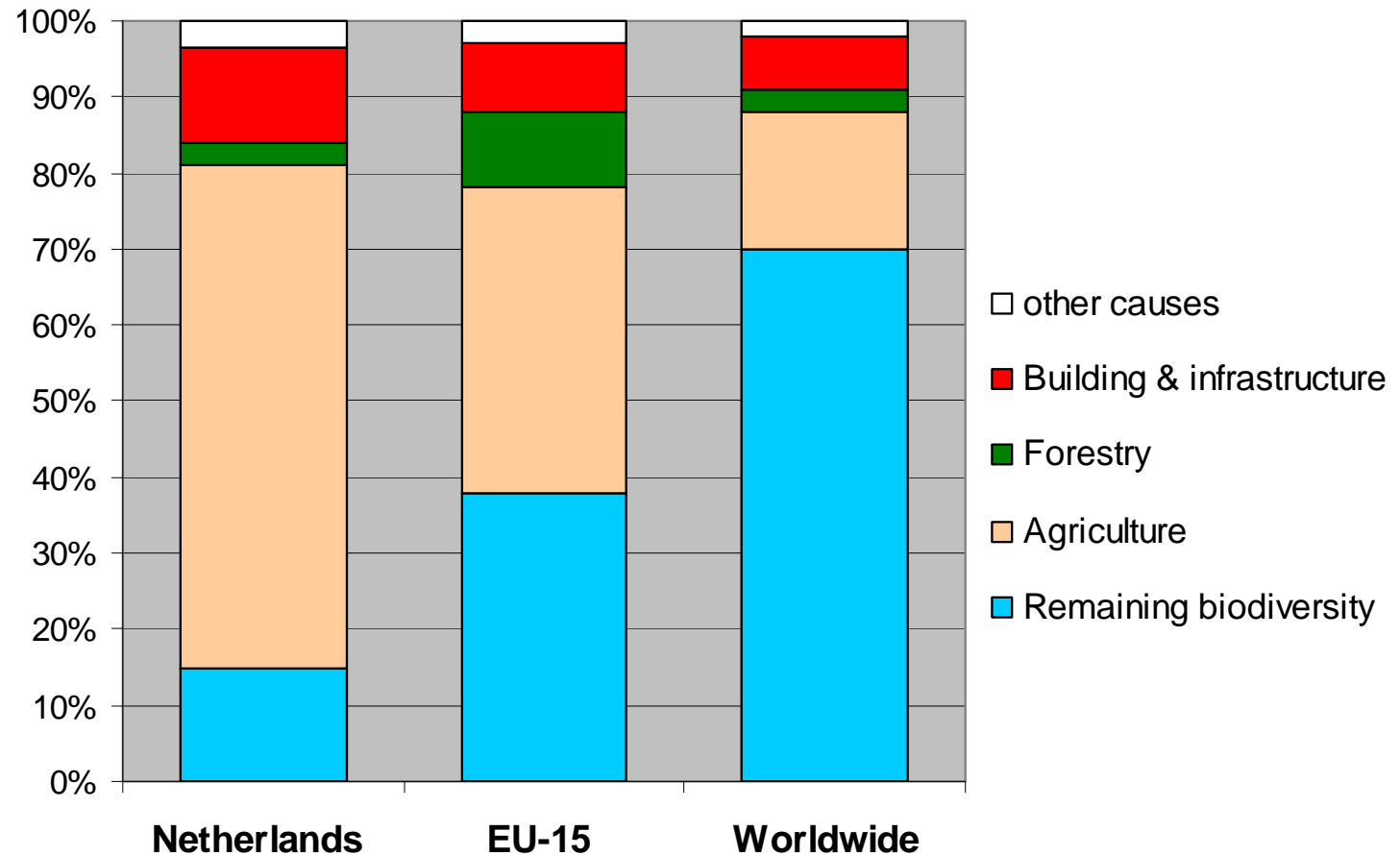
## The floodplain has changed



# “OBSTACLES”



# BIODIVERSITY LOSSES



after MNP, May 2006



# PRINCIPLES OF RIVER RESTORATION

- Restore dynamic hydrologic and geomorphic processes
- Adapt human needs to the natural river system
- Definition of reference conditions
- Restore hydrologic connectivity; longitudinal, lateral and vertical
- The human perception about restored rivers
- Regional differences
- River restoration; an integrated part of IRBM



# WASTE WATER TREATMENT





# MITIGATION MEASURES





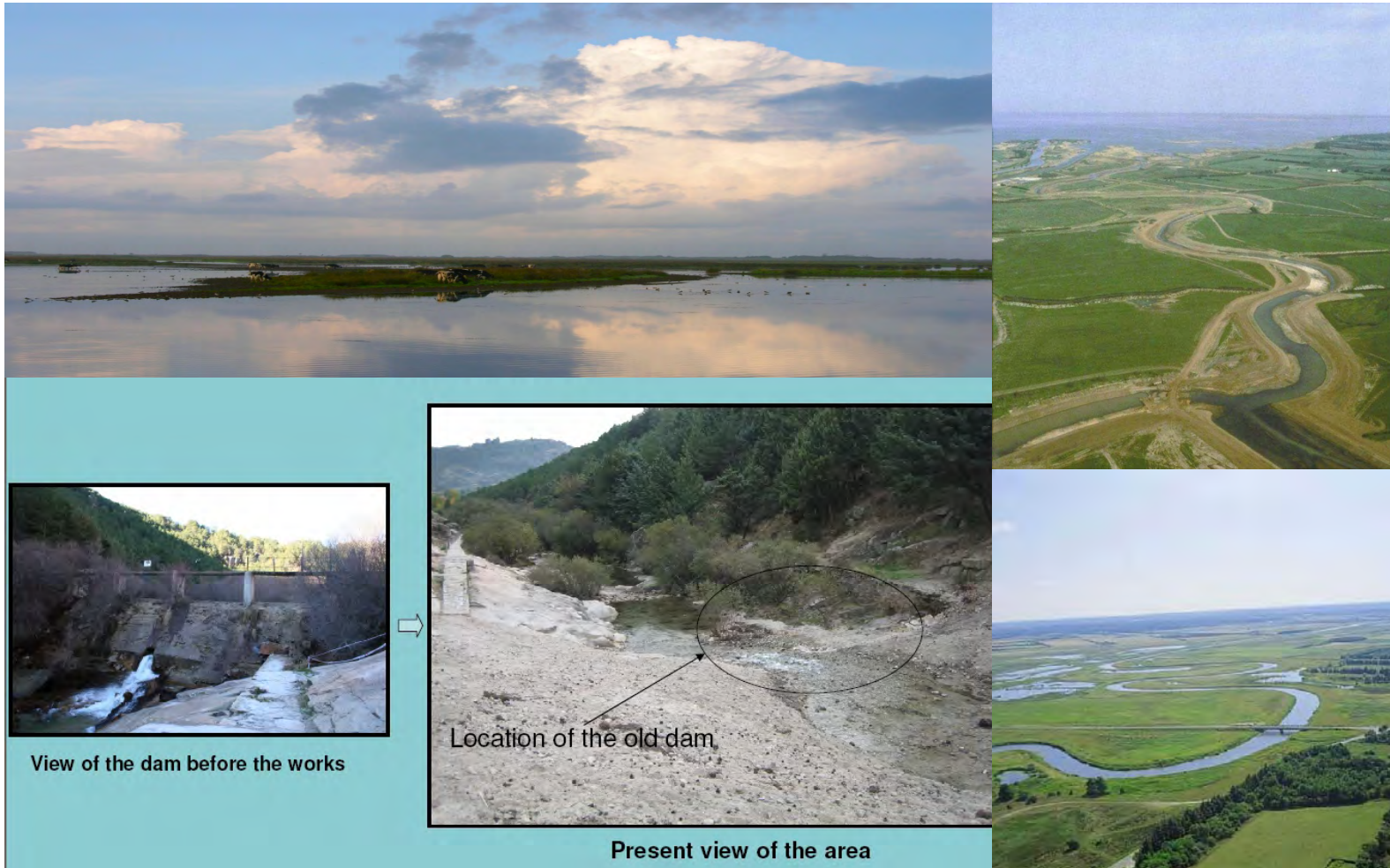


- RR is **eco-system based**
- **Ecological** RR is an integral part of sustainable water management
- ECRR is **connecting people and organizations** working on river restoration (network / platform)
- ECRR supports development of **good/best practices** of river restoration

# RR: HABITAT CONNECTIVITY

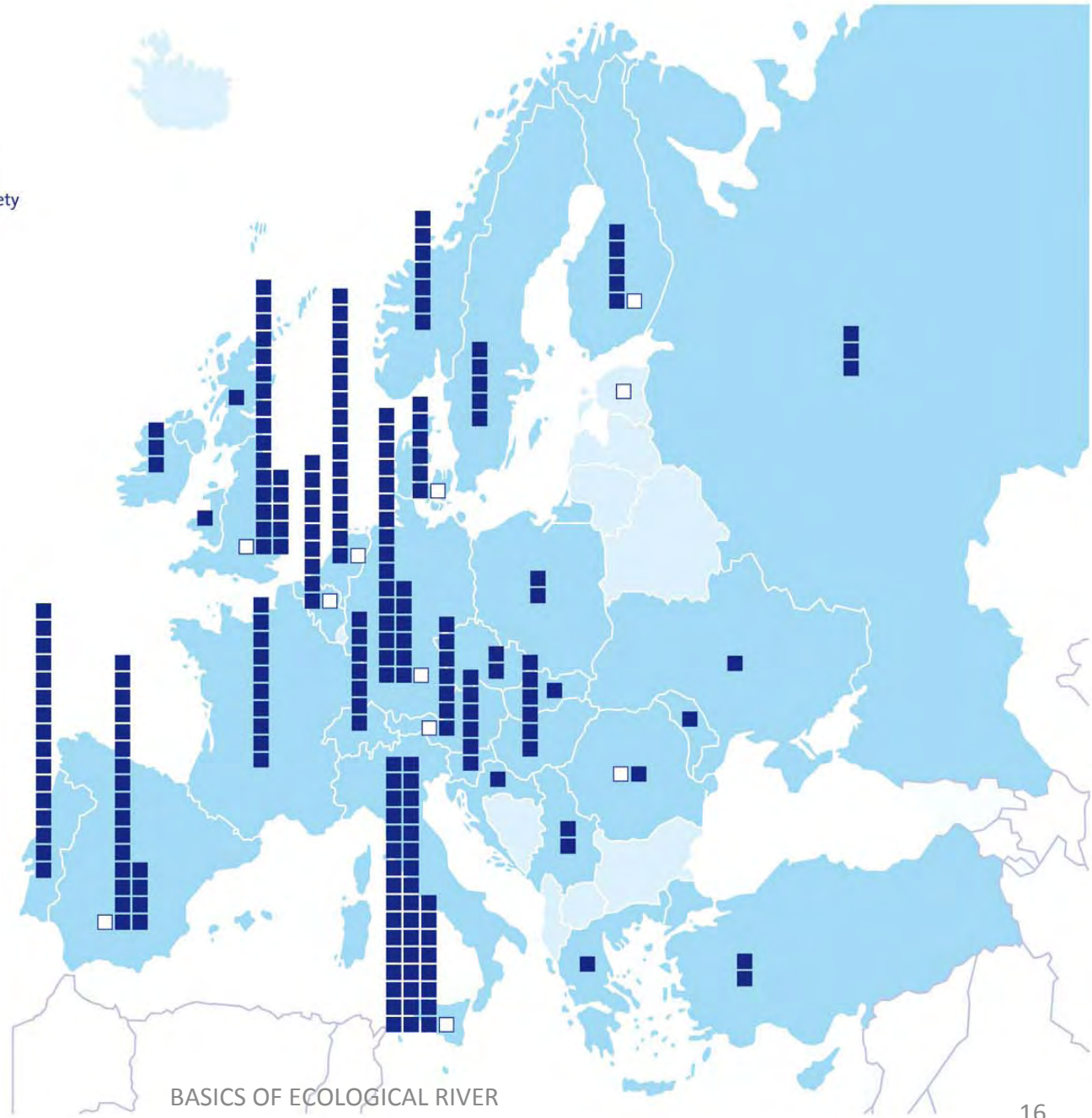


# RR: LONGITUDINAL, LATERAL AND VERTICAL CONNECTIVITY

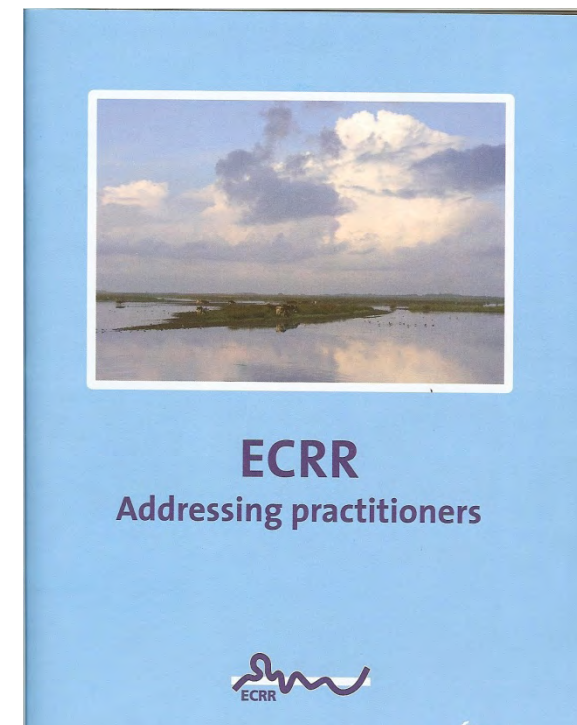
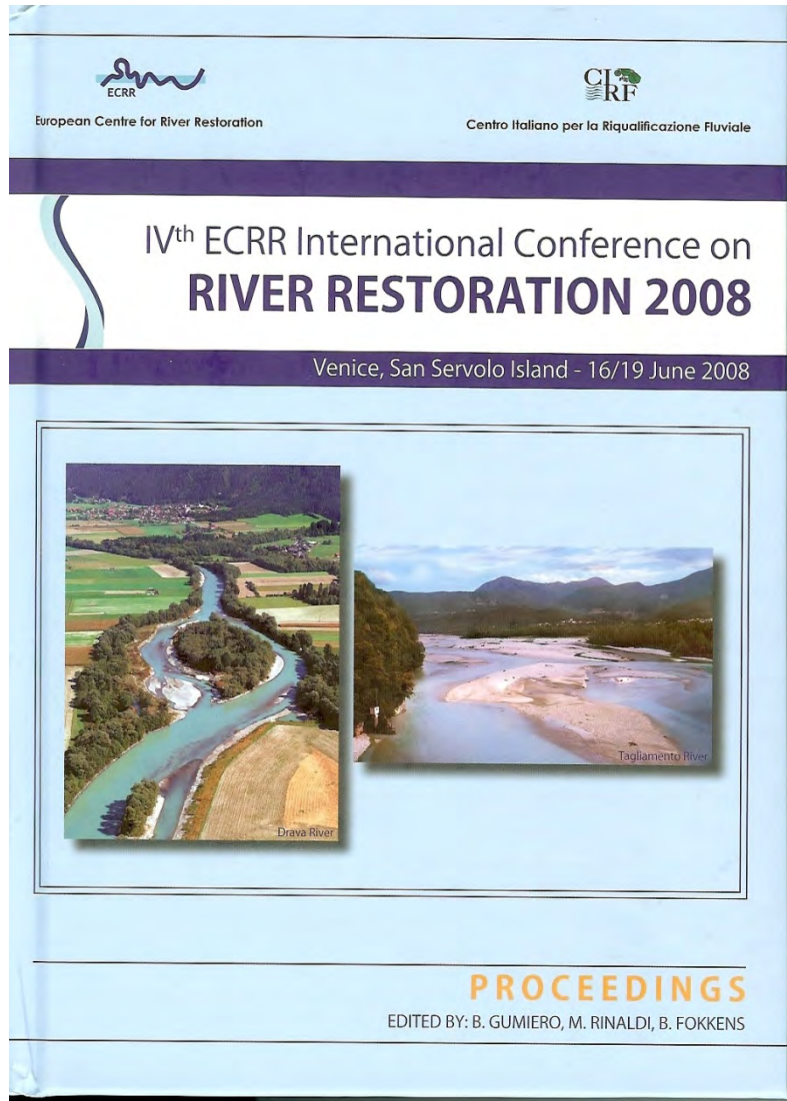


ECRR MEMBERS

- ECRR membership
- Amount of members
- PR Centre / Network / Society









# WFD TIME TABLE

- 2000 Directive into force
- 2008 Draft IRBM Plan
- **2009 IRBM Plan + Plan of Measures**
- 2010 Introduce pricing policies
- **2012 Operational Plan of Measures**
- 2015 Meet environmental objectives; first cycle
- 2021 Second cycle
- 2027 Third cycle



## FISH PASSAGE RIVER DRAVA AUSTRIA





## THUR RIVER SWITZERLAND





## SKERNE RIVER ENGELAND





## PRUT RIVER ROMANIA





## DANUBE RIVER HUNGARY





# NEW POLICY DRIVERS FOR RR

- IMPROVE/EXTEND ECOLOGICAL NETWORKS
- ADAPTION TO CLIMATE CHANGE\
- RENEWABLE ENERY
- FISHERIES
- RECREATION AND TOURISME
- URBAN DEVELOPMENT
- LAND USE CHANGES
- ECONOMIC DEVELOPMENT



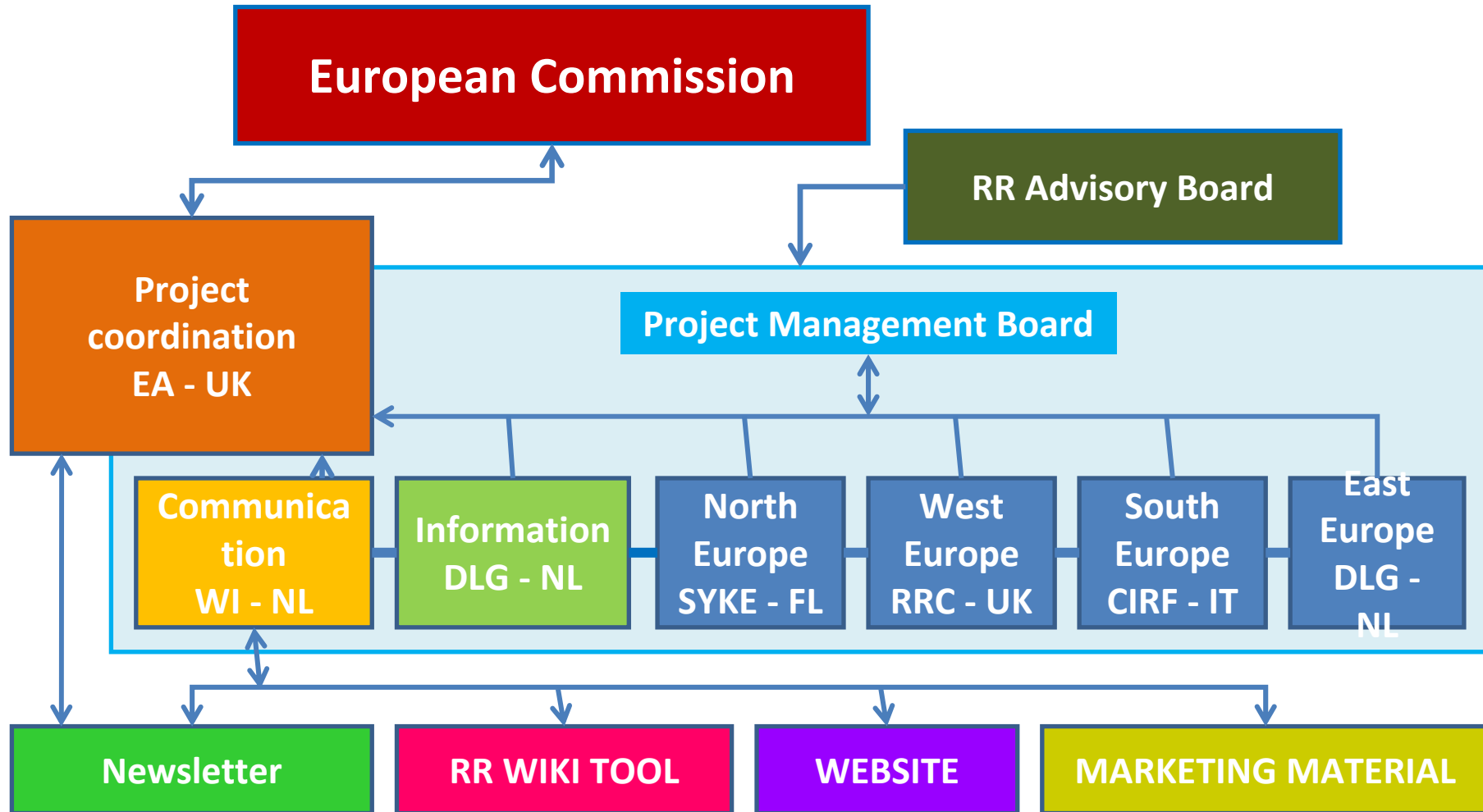


# MAIN TARGET AUDIENCE





# RESTORE PROJECT STRUCTURE





# THANK YOU !

