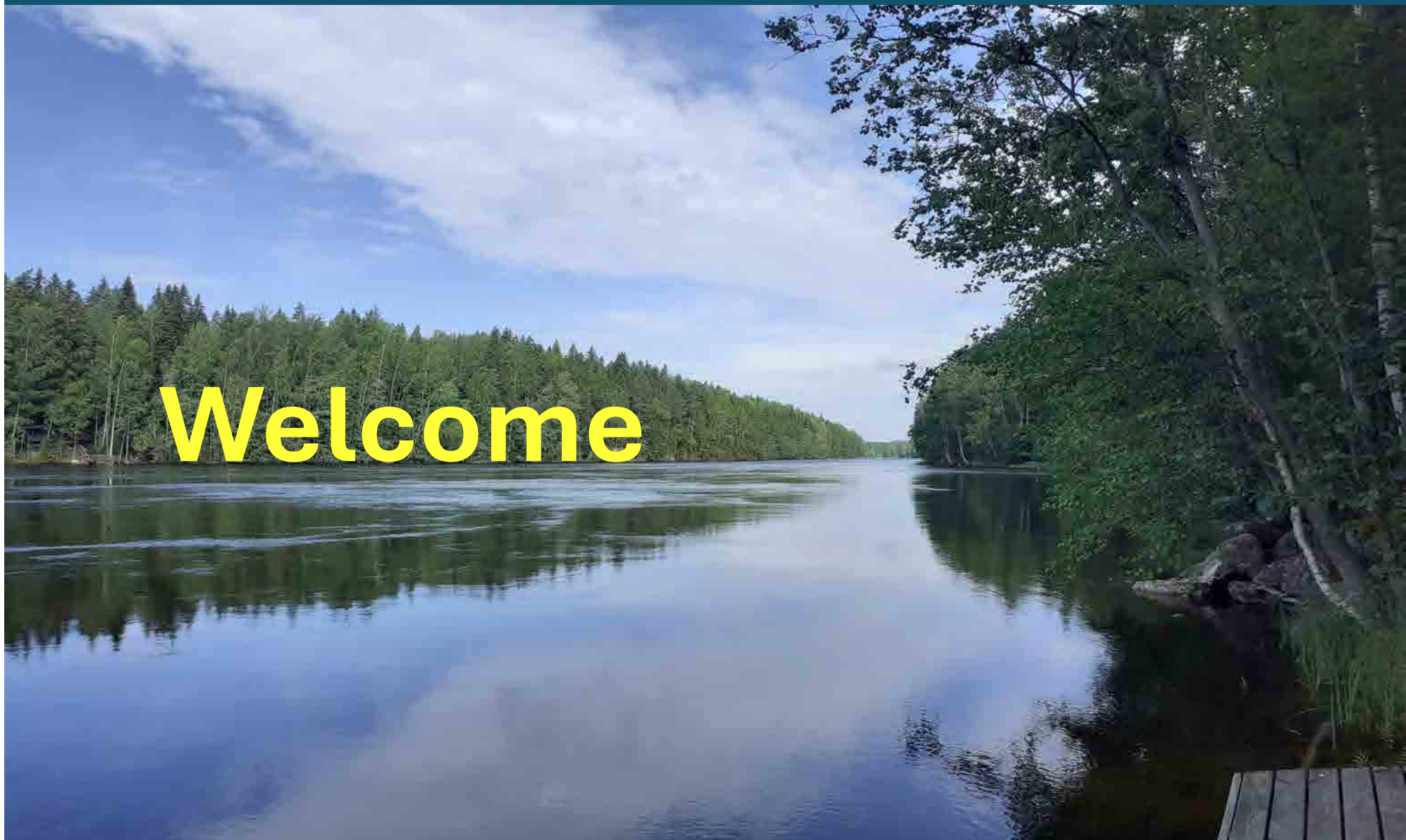
Advancing Freshwater Ecosystem Restoration

Webinar 25th March 2024 16:00 – 18:00 H CET



The network for best practices of river restoration in Greater Europe

ECRR
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Advancing Freshwater Ecosystem Restoration

Opening

Martin Janes *Chairman ECRR*

Julie Magnier *International Network of Basin Organisations*

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Presentations

Freshwater Ecosystems Restoration EU Policies

Valentina Bastino (Policy Officer EC DG Env. Sustainable Freshwater Management)

Looking in the mirror: How Mature is River Restoration?

Prof. Tom Buijse (Deltares, Wageningen University, Netherlands)

Wetlands as part of the River Restoration Game

Tomasz Okruszko (Deputy Rector for Research of the Warsaw University of Life Sciences, Poland)

ECRR's 25 years Drive as a Pioneer and Catalyst for River Restoration in Greater Europe

Martin Janes (Chairman ECRR, Managing Director UK River Restoration Centre)

The network for best practices of river restoration in Greater Europe

ECRR European Centre for River Restoration

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Discussion & Picture

The network for best practices of river restoration in Greater Europe

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International Messages

International River Foundation Message
Philip Weller (IRF Board)

Australian River Restoration Centre Message
Dr. Siwan Lovett (Founder/Managing Director ARRC)

ECRR Heritage, Prospects and Thanks!
Bart Fokkens (ECRR Patron and Coordinator)

Closing
All

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Freshwater ecosystems restoration EU policies

ECCR webinar – 25 March 2024
Advancing freshwater ecosystem restoration

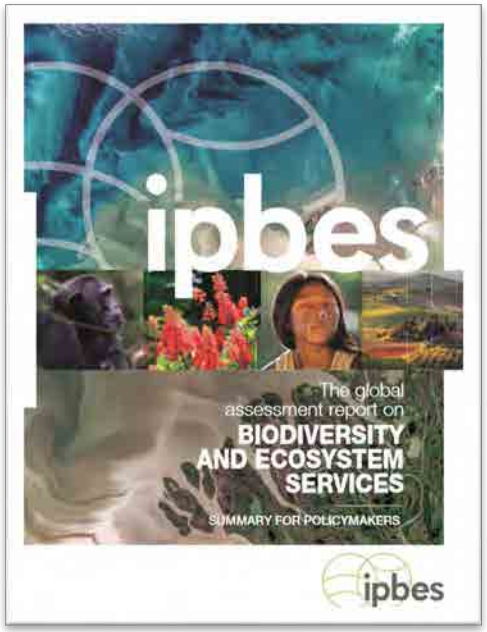
DG ENV – Unit C1 Sustainable Freshwater Management

Restoring freshwater ecosystems

"Inland waters and freshwater ecosystems show among the highest rates of decline"

"More than 85% of the world's wetlands have been lost

"Freshwater species populations suffered an 81% decline"



<u>Cause</u>: multiple pressures including river fragmentation causing:

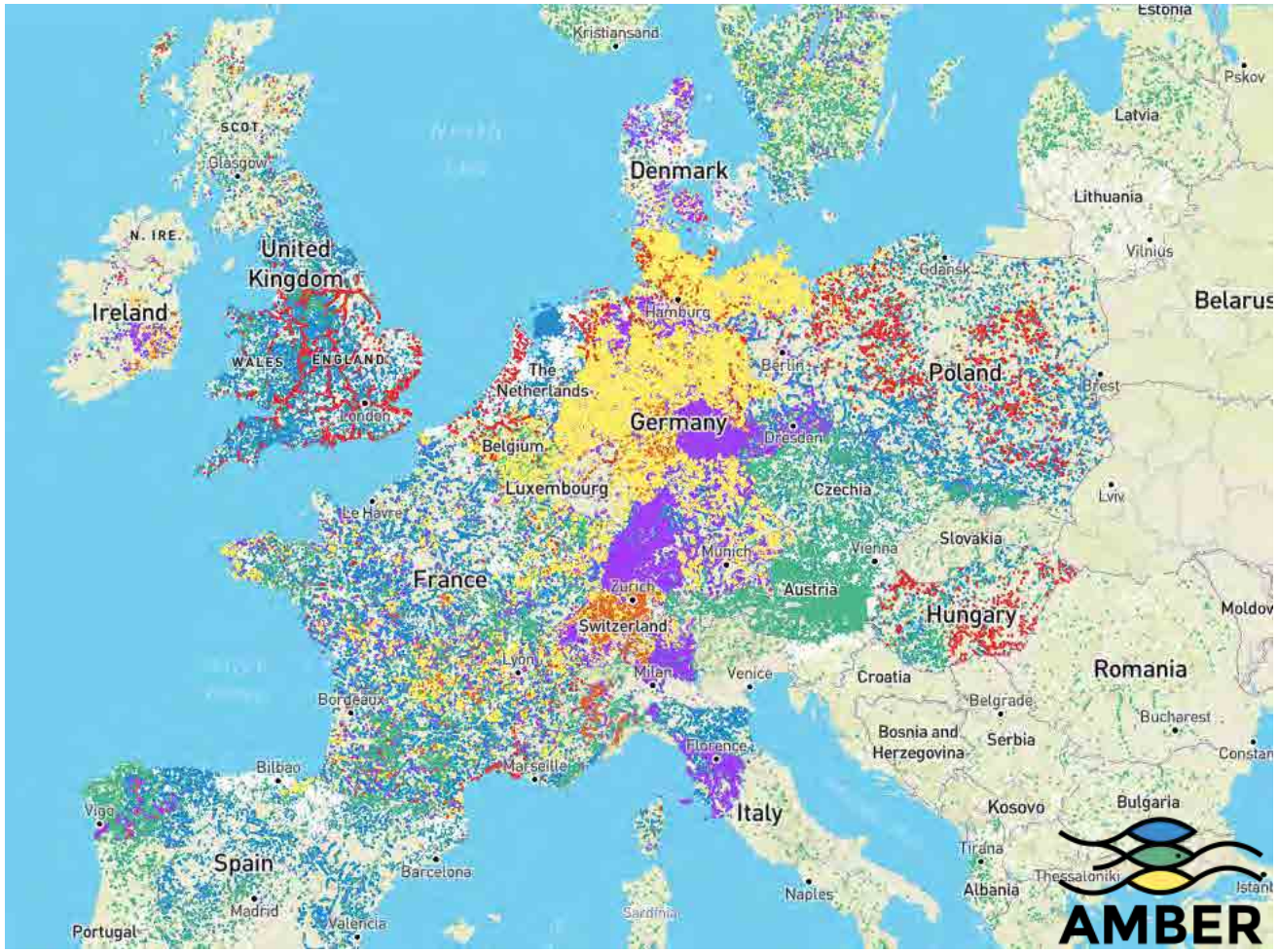
- Modification of flow
- Barrier to migration and sediment transport
- Deterioration of habitats
- …

<u>Impacts on ecosystem services</u>

- Resilience to climate change
- Water supply
- Flood protection
- Recreational activities
- Protection of coastal zones
- Nature protection
- …

Commission

Fragmentation of European rivers



- 1 million barriers
- ~ one barrier every 2 km
- > 85% of all barriers small
- Many obsolete and not in use

European Commission

Main EU policies on freshwater ecosystems

Habitats Directive (1992)

Water Framework Directive (2000)

Eel Regulation (2007)

Pan-European action plan for sturgeon (2018)

Biodiversity Strategy for 2030 (2020)

NATURA 2000

European Commission

Biodiversity strategy for 2030

- 30% of EU land and sea protected
- Restoration of freshwater ecosystems:

1. Increased efforts to **restore freshwater ecosystems and the natural functions of rivers** – WFD objectives to be met by 2027
2. Restore **at least 25,000km free flowing rivers** by 2030
    - Removal of primarily obsolete barriers
    - Restoration of floodplains and wetlands
3. Restore and preserve **ecological flows** – WFD objectives to be met by 2027

Guidance on barrier removal

- Aim : provide technical guidance to help Member States identify sites and help mobilise funding, to reach 25,000 km of free-flowing rivers by 2030 at EU level

- Main aspects developed in the guidance :
  - **Definition of free-flowing rivers**
  - Interplay of this target with the Water Framework Directive and Habitats and Birds Directives
  - Summary of knowledge currently available in Europe
  - Actions and steps needed for connectivity restoration
  - Guidance on data collection, tools and strategies for connectivity restoration
  - Summary of existing EU financing tools

Definition

- 25 000 km of free-flowing rivers - intuitively easy BUT
  - no established consensus as to what criteria would define a free-flowing river
  - no ready-to-use indicator to measure free-flowing rivers
- Definition proposed:
  - a *free-flowing river* is one that supports connectivity of water, sediment, nutrients, matter and organisms within the river system and with surrounding landscapes, in all dimensions, and is not impaired by anthropogenic barriers and is not disconnected from its floodplain when a floodplain is present
  - natural impediments (e.g. woody debris, waterfalls, beaver dams) – not considered barriers

In practice

Proposed focus

- barriers to longitudinal and lateral connectivity of river systems
- concentrate primarily on ‘obsolete barriers’
- other complementary measures to restore floodplains and wetlands

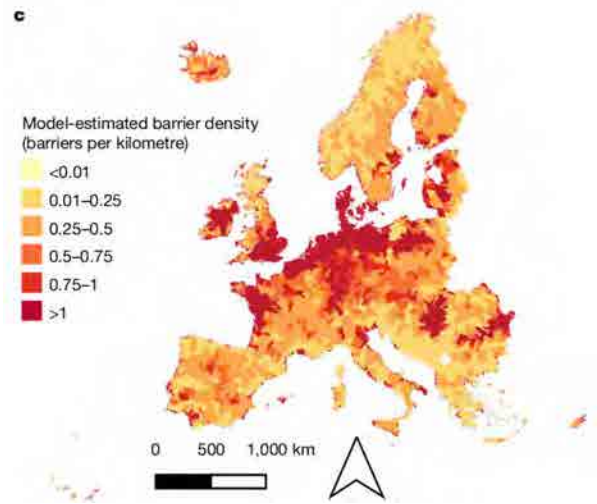
Proposed actions

- undertake or maintain efforts to remove artificial barriers, **both transversal and lateral**, where such opportunities exist
- develop, in parallel, a **set of harmonised criteria**, under which river stretches could be defined as free-flowing and thus be counted towards the 2030 goal.

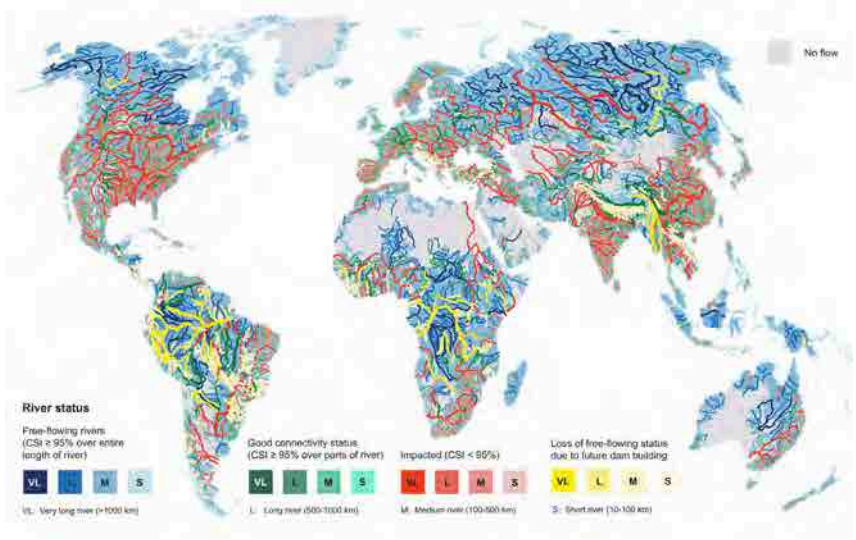
What is a free-flowing river?

WORK IN PROGRESS!

- Free-flowing rivers (FFR) group of experts established.
- Starting point for FFR group: stretches of free-flowing rivers (absence of artificial obstacles) within a network of rivers complying with the continuity requirements of WFD
- Longitudinal and lateral barriers



Belletti et al., 2020, Nature



Grill et al., 2019, Nature

European Commission

Criteria for FFR

WORK IN PROGRESS!

Key elements:

1. Segmentation - defining assessment unit
2. Criteria for connectivity within the section - longitudinal:
   - Focus on fish and sediment transport
3. Criteria for connectivity within the section - lateral
   - Definition of the corridor around the river bed where lateral connectivity will be assessed
4. Large scale assessment:
   - What happens upstream and downstream

Barrier types

WORK IN PROGRESS!

- Typology of longitudinal and lateral barriers
- Attributes (e.g. height, width, mitigation measures)
- Impacts on river continuity
- Impacts could vary depending on river characteristics: size, channel type, confinement…

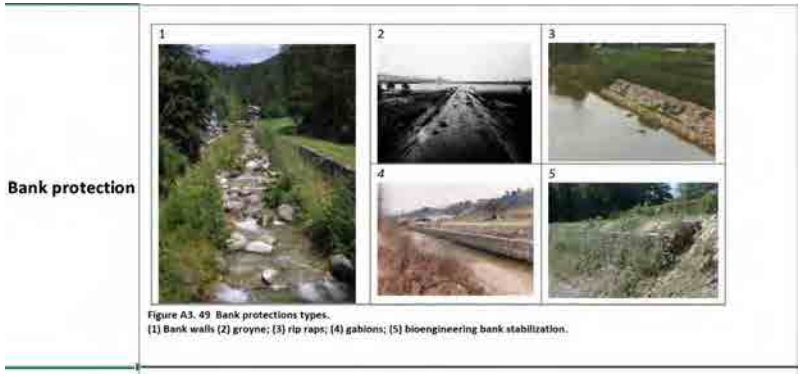


Figure A3. 49 Bank protections types.
(1) Bank walls (2) groyne; (3) rip raps; (4) gabions; (5) bioengineering bank stabilization.

Consolidation weir (left); series of check-dam (right)

European Commission

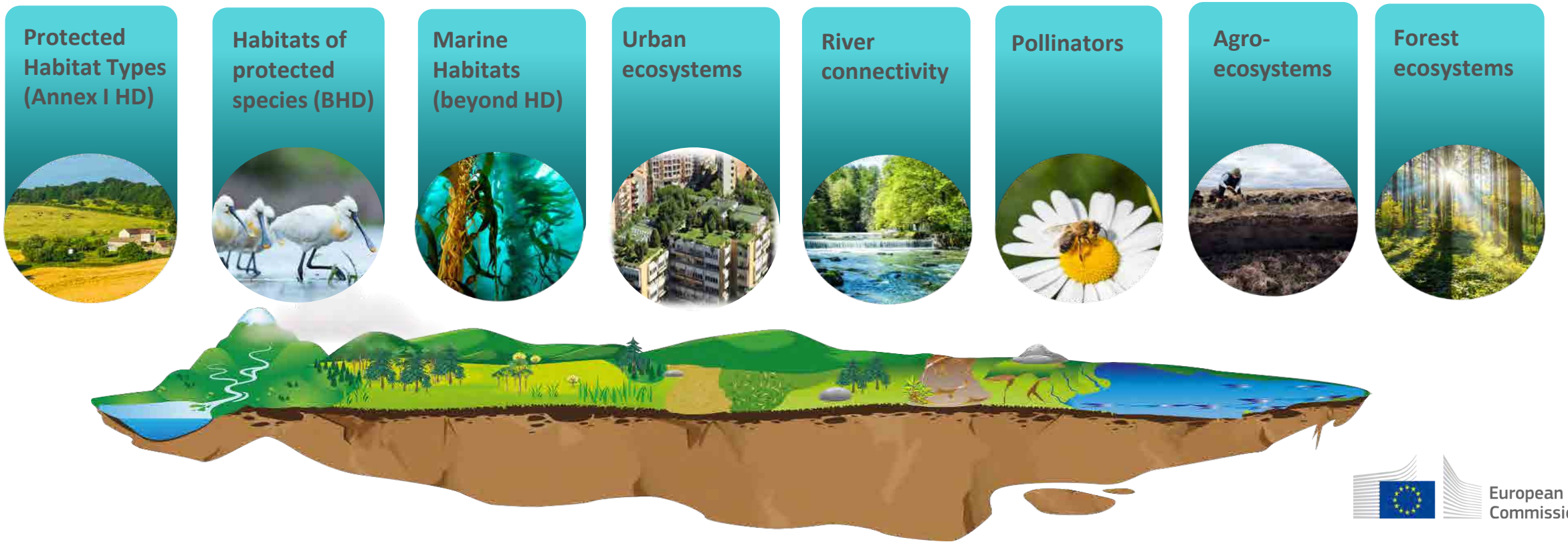
Nature Restoration Law

Aims to achieve large scale restoration efforts:

- by **complementing and building on existing policy framework**:
  - Nature Directive, WFD, MSFD,…
- by focusing on the **synergies between climate change and nature policy**
- by proposing a set of **specific restoration targets**

Nature Restoration Law

Specific restoration targets



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Groups of habitat types (Annex I & II)

1. Wetlands (inland & coastal)
2. Forests
3. Grasslands and other pastoral habitats
4. **River, lakes, alluvial and riparian habitats**
5. Heath & scrub
6. Rocky and (Coastal) & dunes

1. Seagrass beds
2. Macroalgal forests
3. Shellfish beds
4. Maerl beds
5. Sponge, coral and coralligenous beds
6. Vents and seeps
7. Soft sediments (above 1000 meters of depth)

River connectivity – Art. 7

Identify and remove barriers that prevent the connectivity of surface waters to contribute to…

→ ..the targets for riverine habitats & ecosystems

→ …the objective of restoring at least 25 000 km of free-flowing rivers in the EU by 2030

"Components" of the exercise

1. Inventory
2. Identification of barriers to be removed according to… (see point 3)
3. MS plan and timetable set out in National Restoration Plan
4. Other measures to complement removal

European Commission

Thank you

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Looking in the mirror: How Mature is River Restoration

Tom Buijse
(Deltares, Wageningen University. The Netherlands)

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CELEBRATING 25th ANNIVERSARY

25-03-2024

Side arm restoration (Danube, AT; 1998 -> 2024)

Source: Schiemer et al 2007 Ecohydrology & Hydrobiology 7: 101

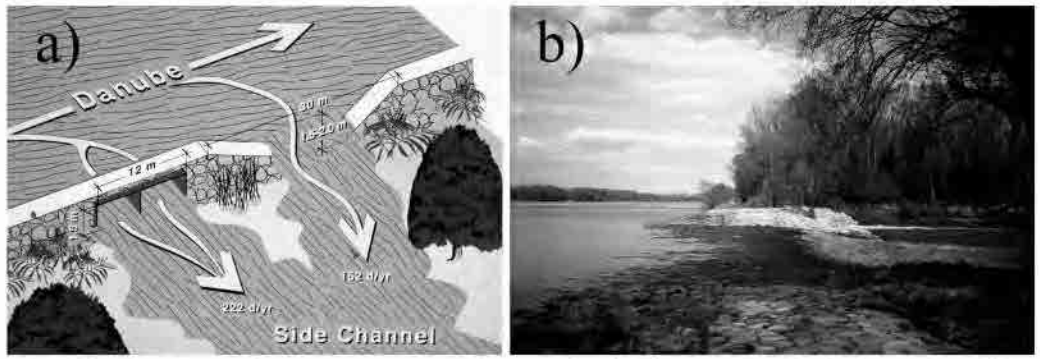

Fig. 7. The Danube restoration programme at Regelsbrunn, a first decisive step. Restoring the lateral connectivity between the river and the floodplains by lowering the inflow areas, construction of lateral weirs and enhancing the longitudinal through-flow in the side arm system (a). A photograph of an inflow area (b). After Schiemer *et al.* 2006

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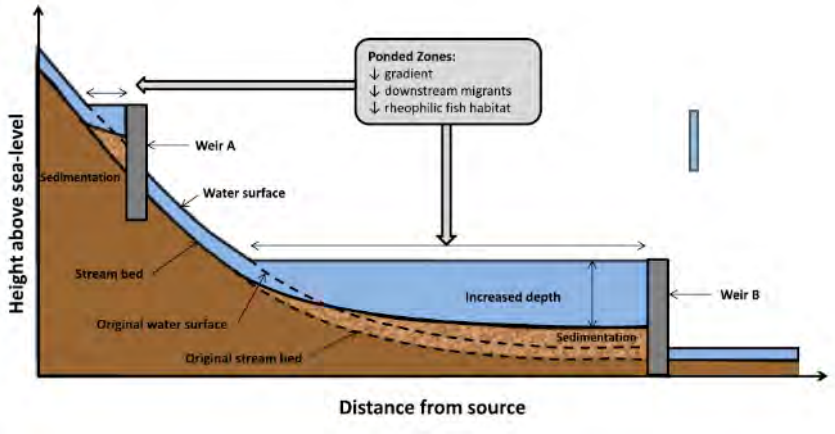
Side arm restoration (Rhine, NL; 1993 -> 2024)

From fish passes to barrier removal

AMBER

Barrier Atlas

DAM REMOVAL EUROPE



Source: Birnie-Gauvin et al 2017 Aquatic Conserv: Mar Freshw Ecosyst 27: 1345

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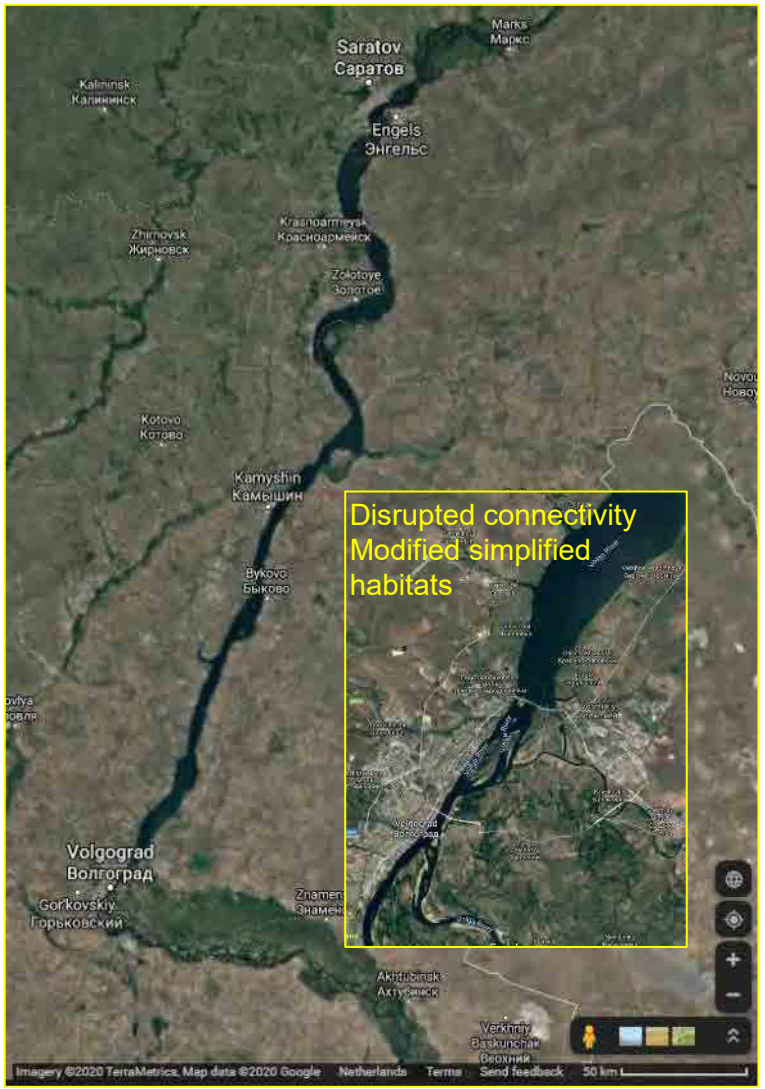
Hydropower reservoirs (Volga river, Russia)



The length of the Volgograd reservoir

- Dam at Volgograd has a height of 44 m
- The Volga river has a slope of 8 cm / km

44 m = 4400 cm
4400 / 8 = 550 km
Amsterdam -> Paris = 508 km

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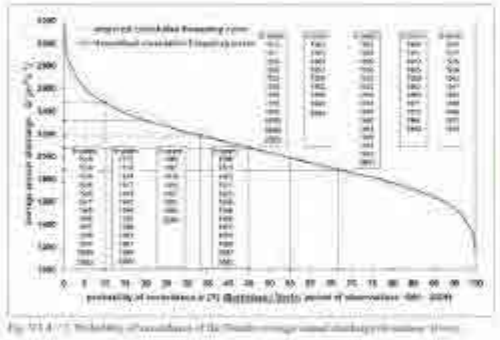
EU Water Framework Directive

Hydromorphological Quality Elements (HYMOQE)

For the implementation of the Water Framework Directive, the assessment of ecological status of water bodies may be complemented with use of hydrogeomorphological (HYMO) indicators. For inland surface waters these are:

Hydrological regime



[1]

- Quantity and dynamics of water flow
- Connection to groundwater bodies

River continuity

[2]

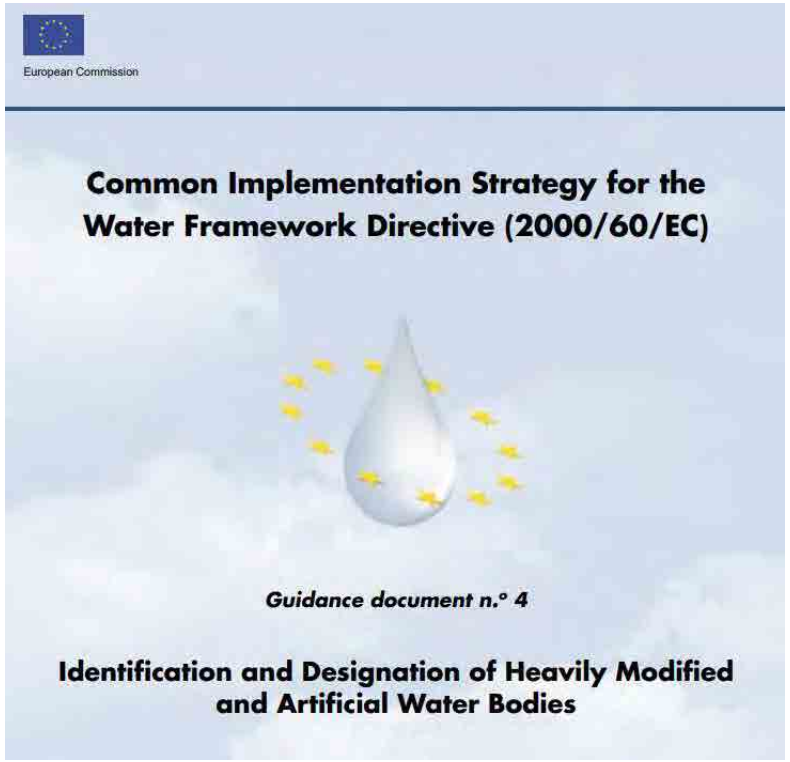
- River continuity

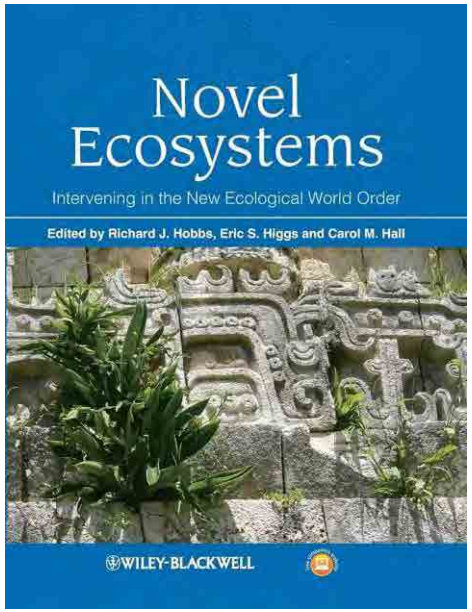
Morphological conditions

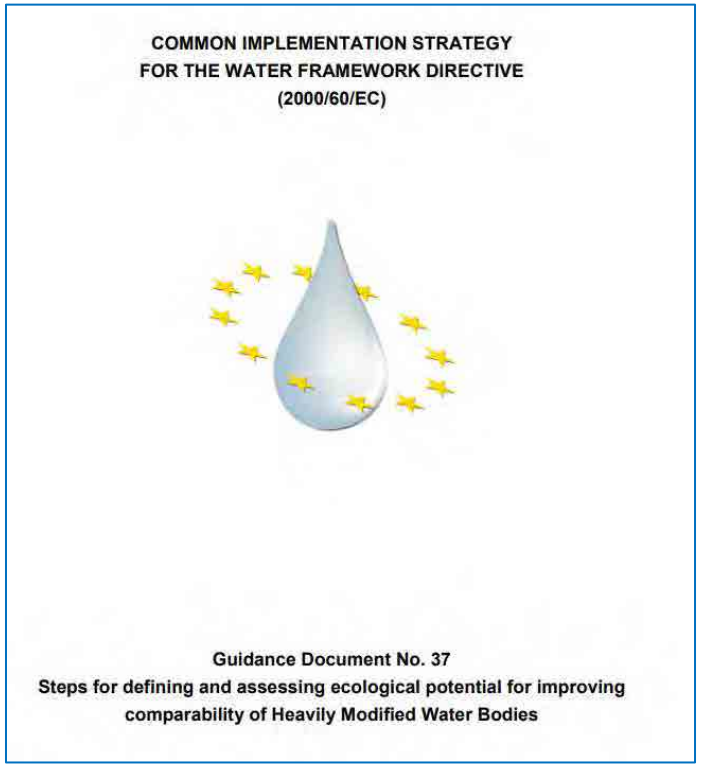
[3]

- River depth and width variation
- Structure and substrate of the river bed
- Structure of the riparian zone
- Structure of the floodplain

Heavily modified water bodies







CIS Guidance No 37
Mitigation Measure Library

REFORM
REstoring rivers FOR effective catchment Management

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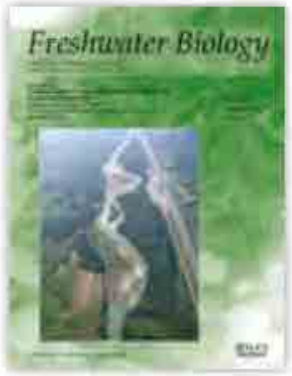
Creating evidence



Volume 60, Issue 6

Special Issue: Towards a Predictive Restoration Ecology: A Case Study of The French Rhône River

Pages: 1069-1236

June 2015

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Learning by doing and from failures

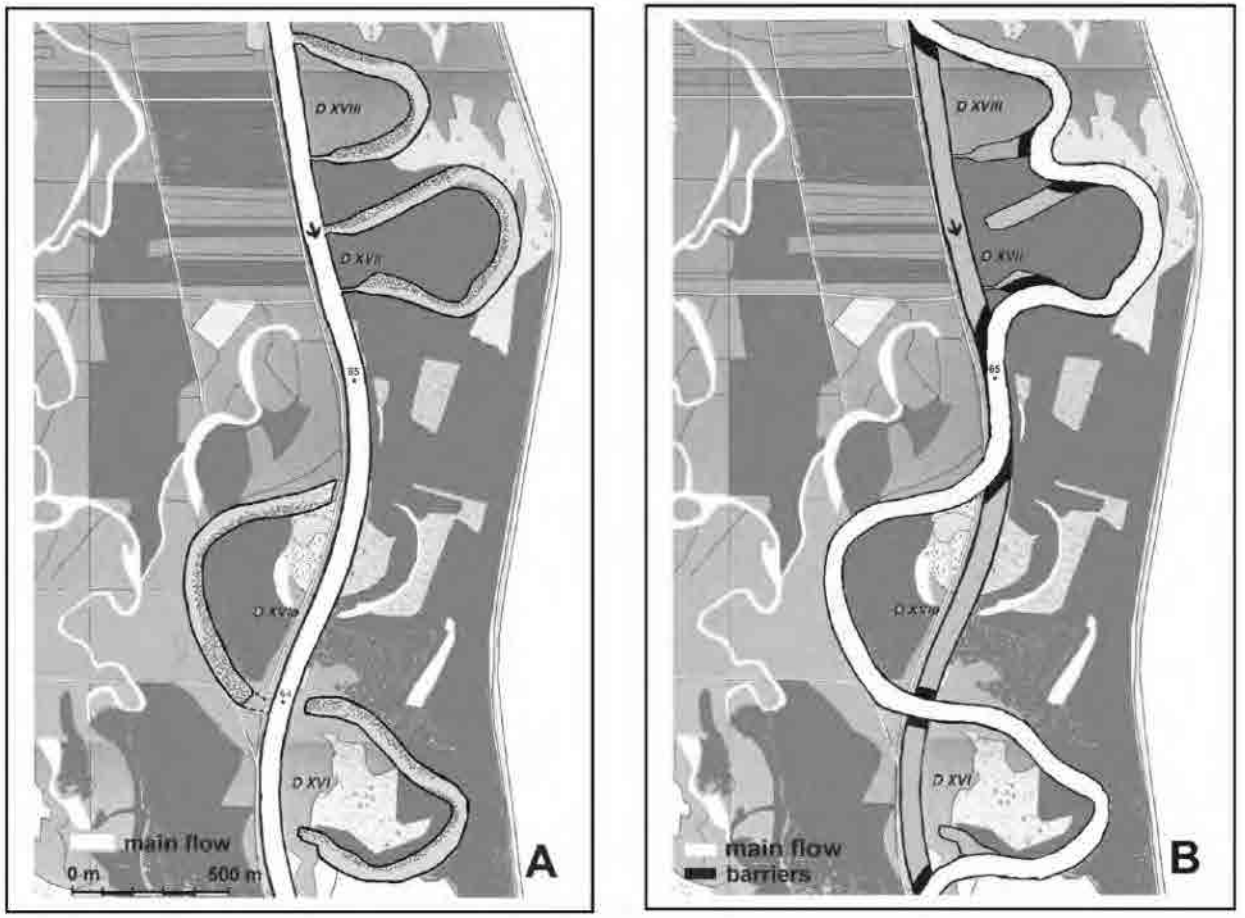

Fig. 2. Meander reconnection on the Morava river. A: present state; B: full meander integration (HOLUBOVÁ 2002).

Source: Holubova et al 2005 Archiv Hydrobiol. Suppl. (Large Rivers 15) 155: 507

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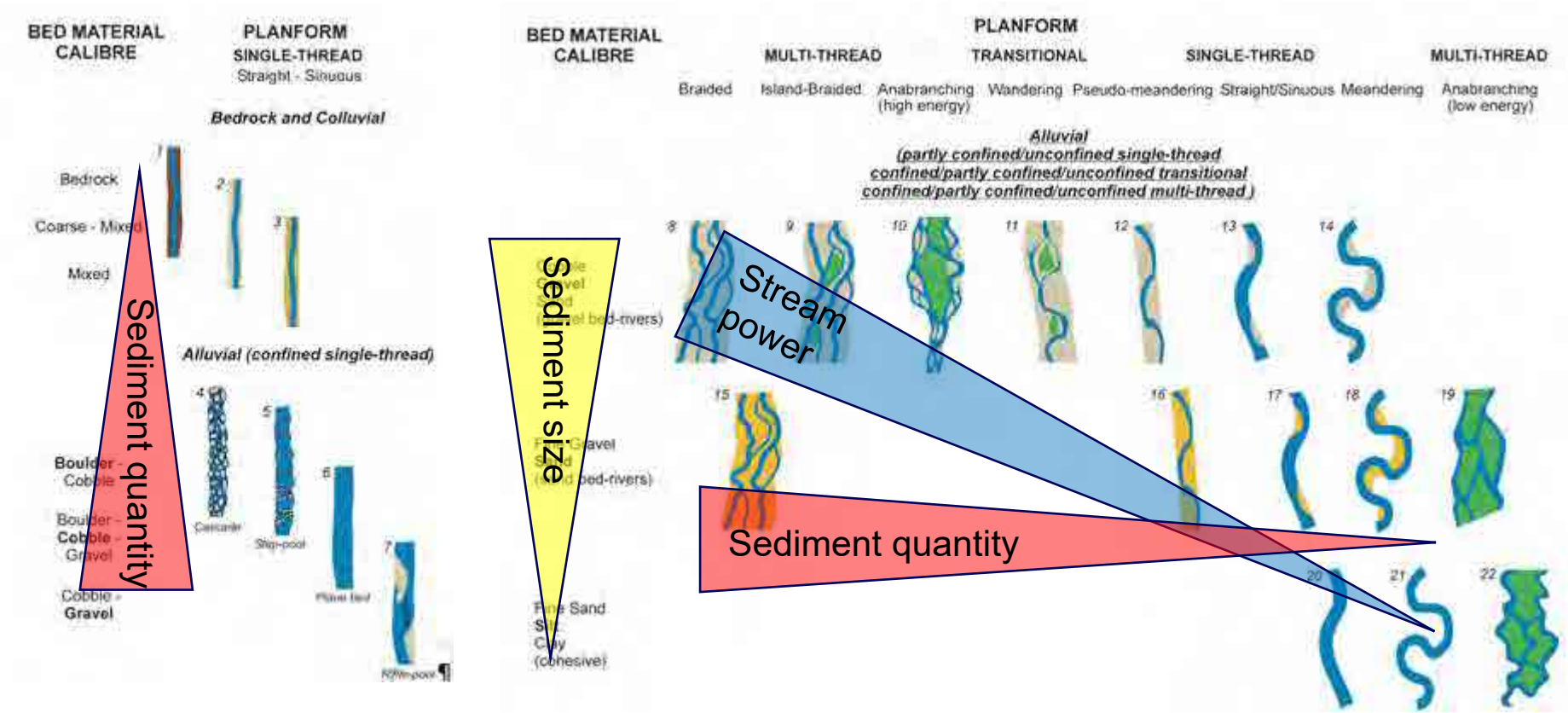
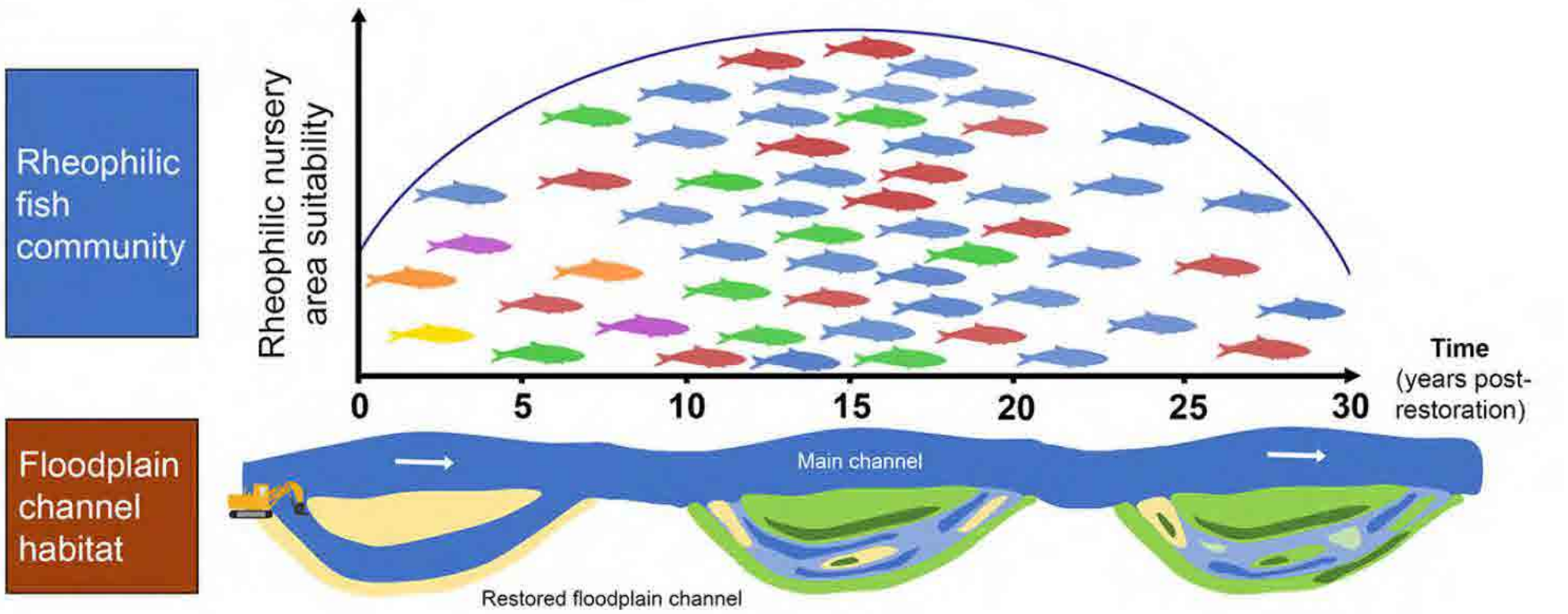
River restoration: pattern- or process-based?

HyMo processes and vegetation affecting river reaches



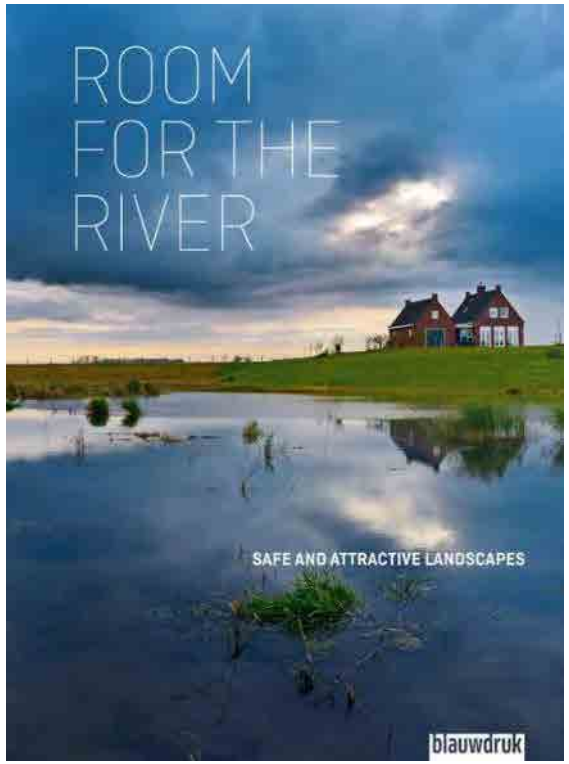
\+ .... interaction with vegetation

Aging restoration projects may require maintenance



Stoffers et al. (2021) 30 years of large river restoration: how long do restored floodplain channels remain suitable for targeted rheophilic fishes in the lower river Rhine? STOTEN 755: 142931.

Multiple goals to upscale restoration



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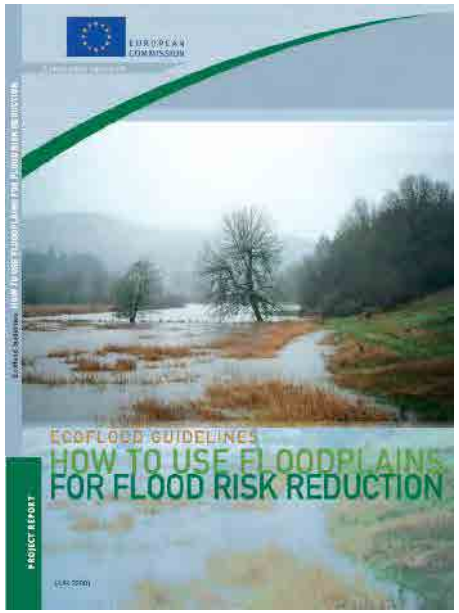
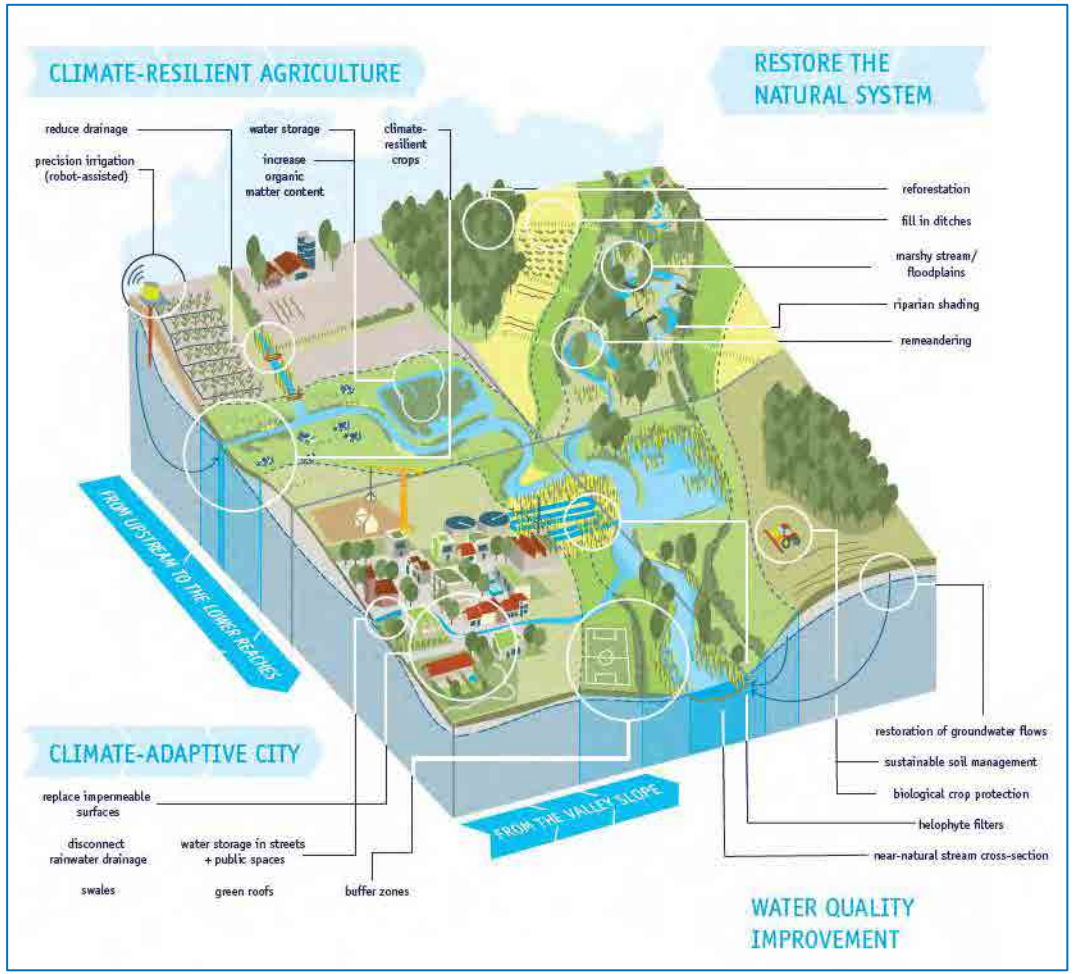
Not only floods but also droughts





To a climate resilient lowland stream valley: nature based if possible, technical if necessary

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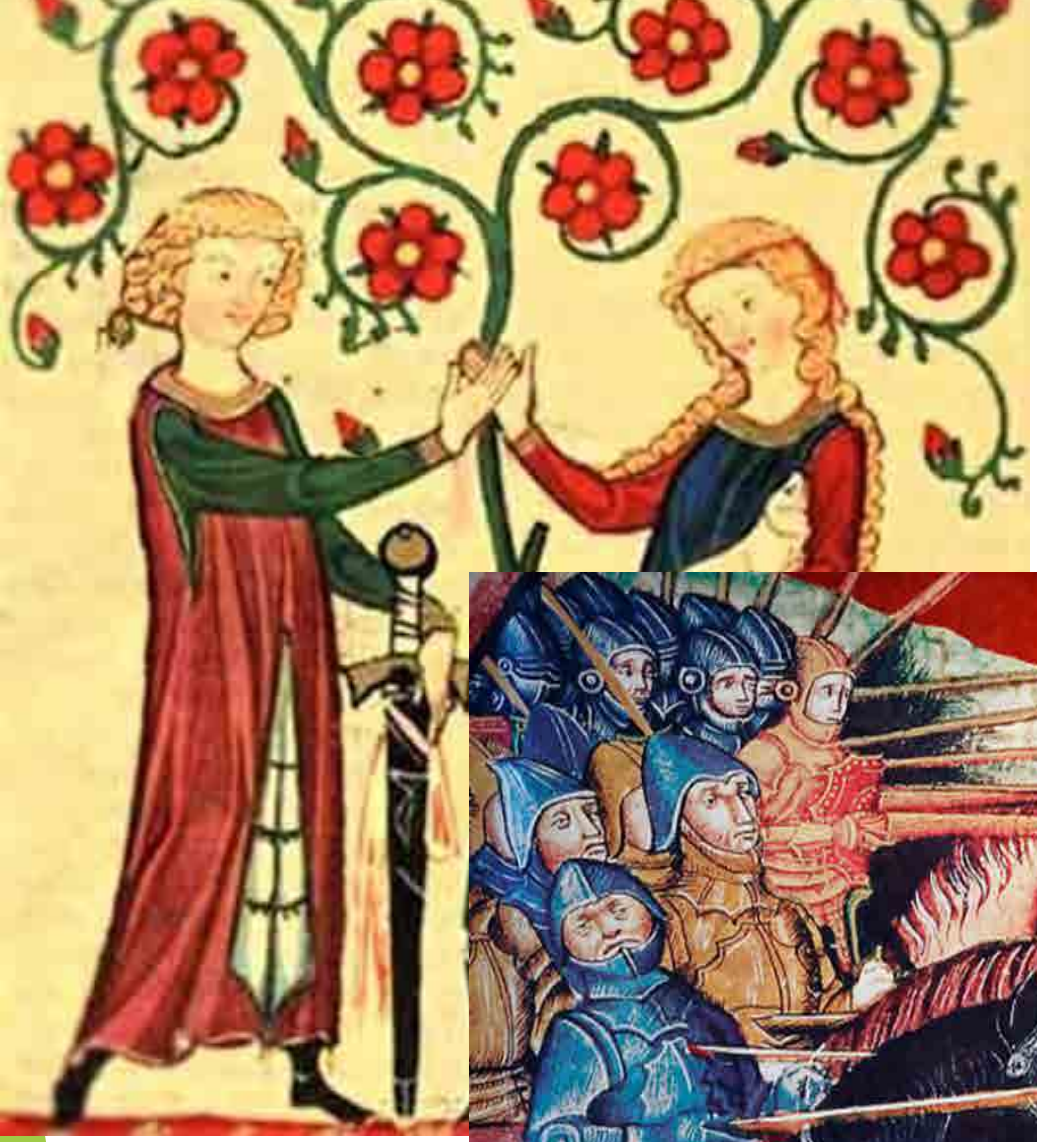
Has River Restoration become mature?

- Moving towards system restoration
  - From fish passages restoring connectivity to barrier removal restoring both longitudinal continuity and habitats
  - Rivers and streams are situated in catchments: there are restoration needs in floodplains and beyond
- We now know what hydromorphology is
  - Heavily modified water bodies are novel ecosystems: we cannot restore the past
- Restoration should be forward looking
  - Anticipate on changing conditions (climate, discharge pattern, species)
- Rivers are socio-ecological systems
  - Embrace multiple goals to upscale
- Learning by doing: collecting evidence is key.
  - Excellent river restoration projects exist

Wetlands as part of the river restoration game

Tomasz Okruszko
Institute of Environmental Engineering,
Warsaw University of Life Sciences, Warsaw, Poland

ECRR, March, 25th 2024

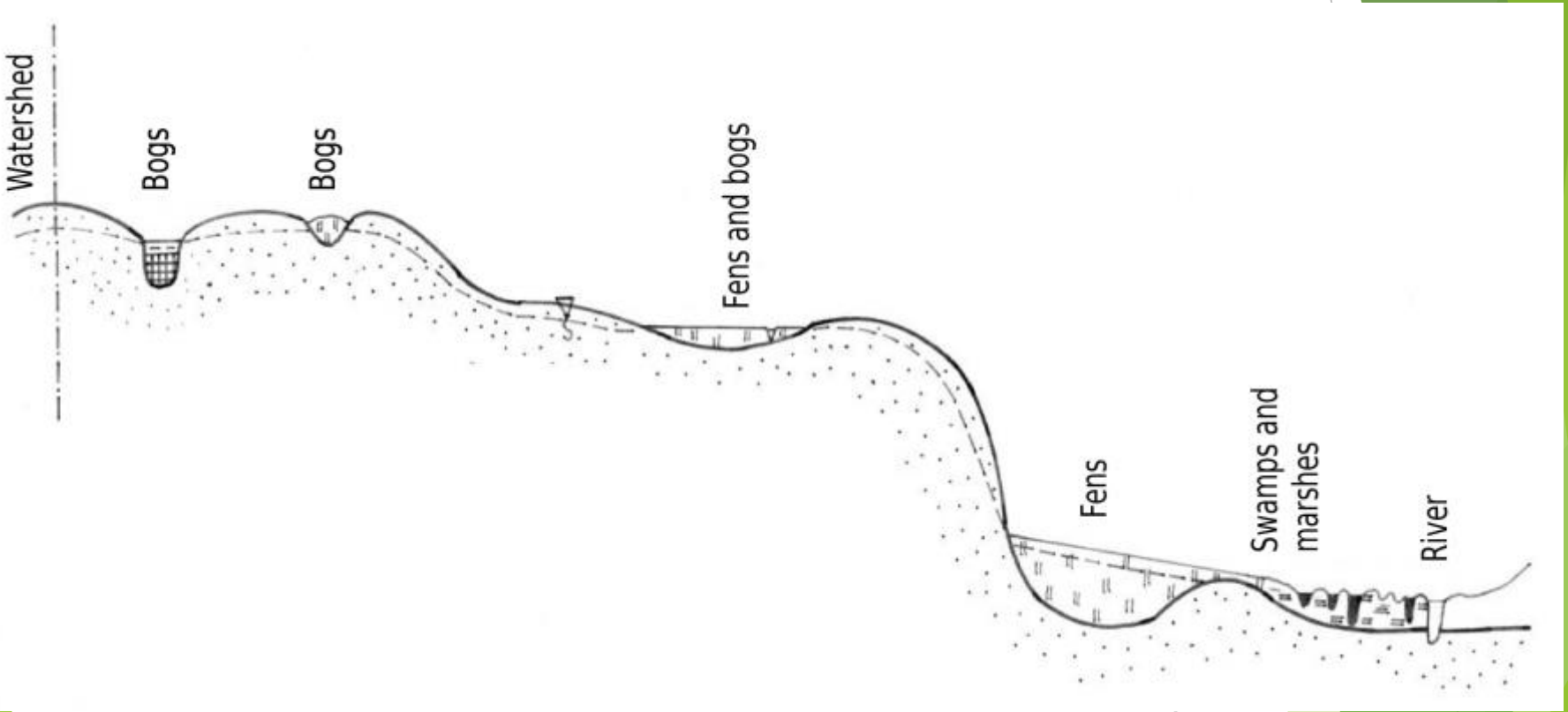


http://www.jornalet.com/7041

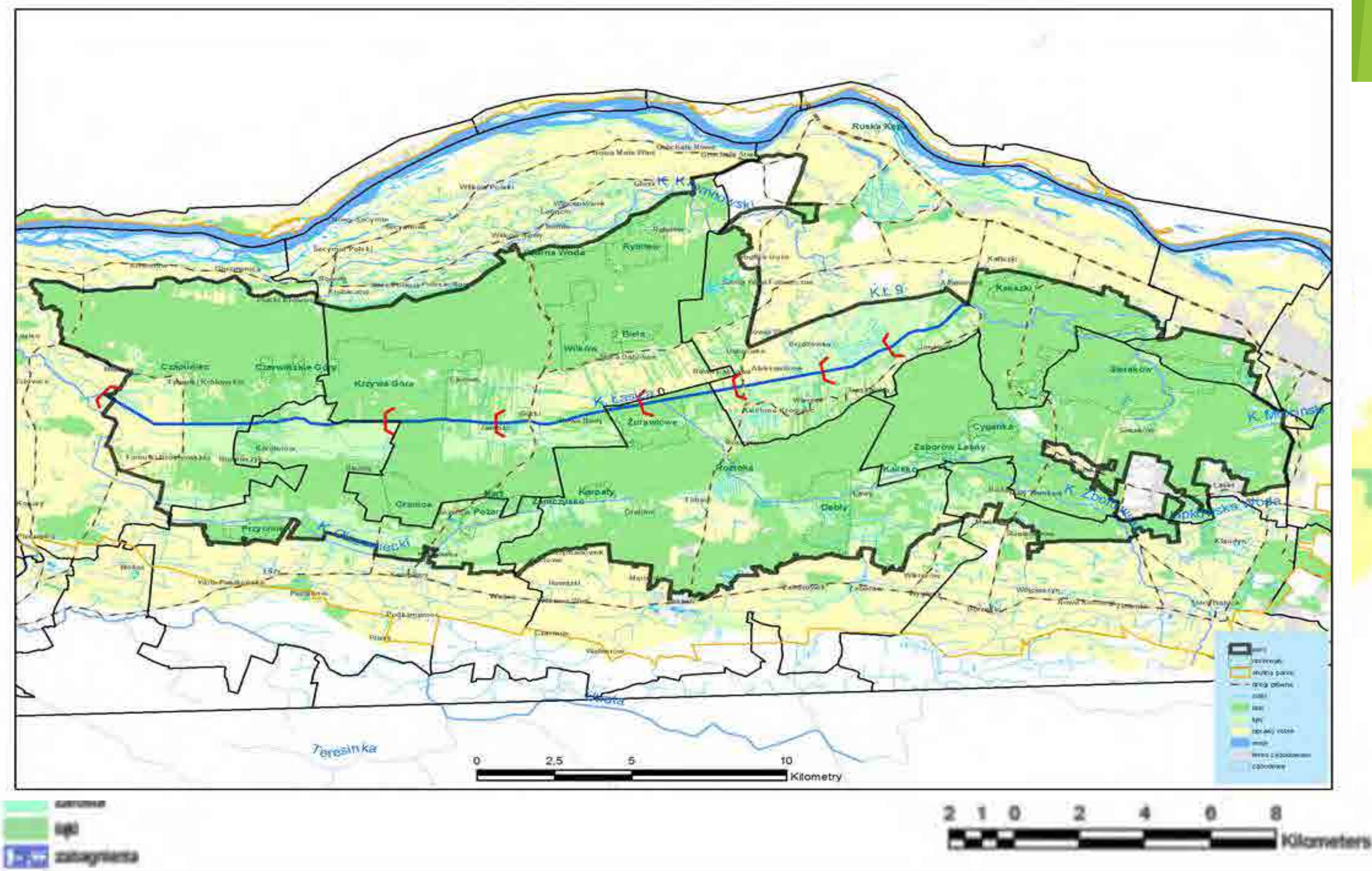
Outline

- Introduction
- Four cases (of generic nature)
- Conclusions

Location of the different types of wetlands in landscape



Kampinos National Park by Warsaw

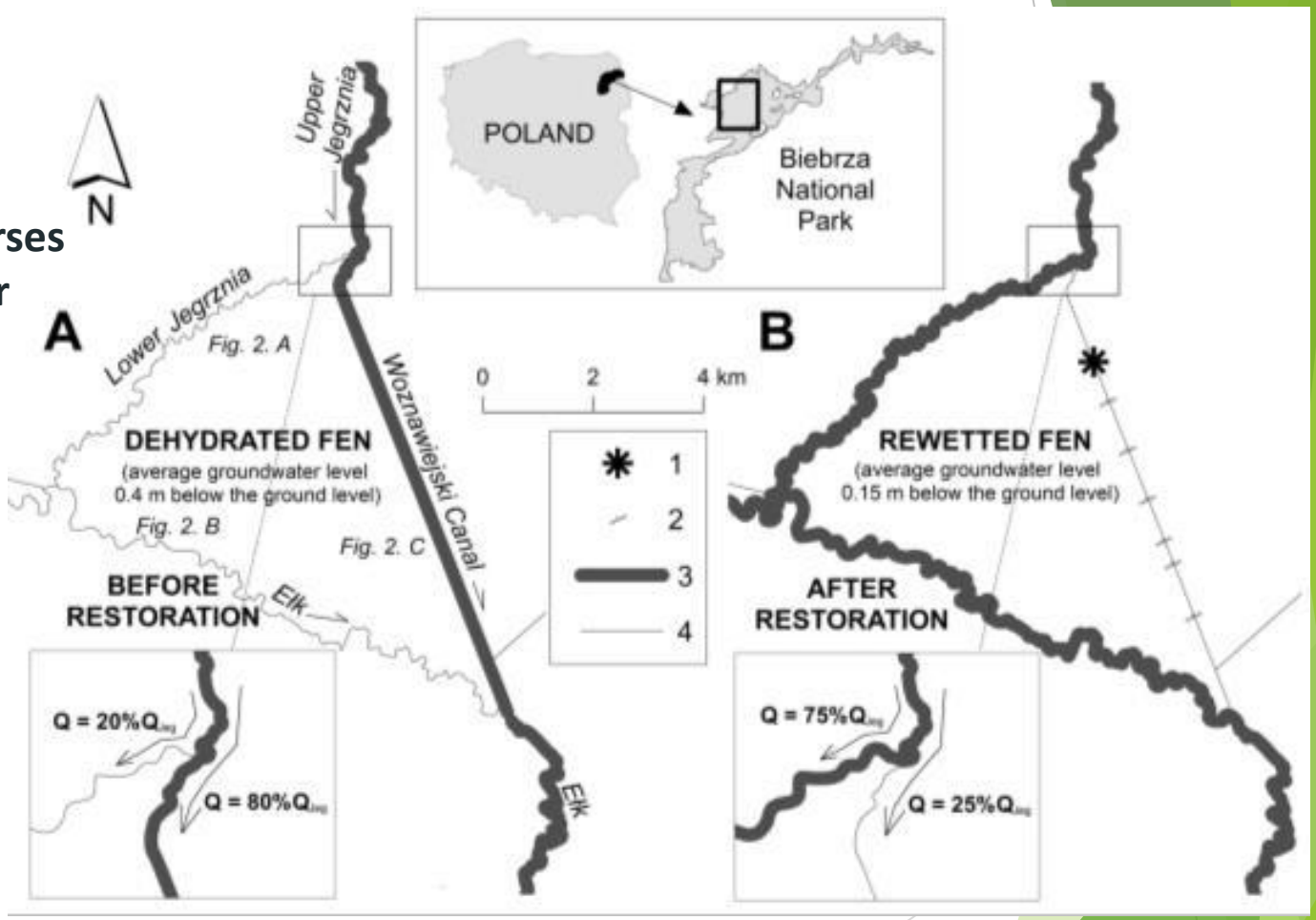


Gilly map, 1803

https://kampinoski.eu/2018/11/kolejne-zmiany-na-szlakach-mostek-na.html

Biebrza National Park NE Poland

1 – weir
2 – spillways
3 – main water courses
4 – secondary water courses



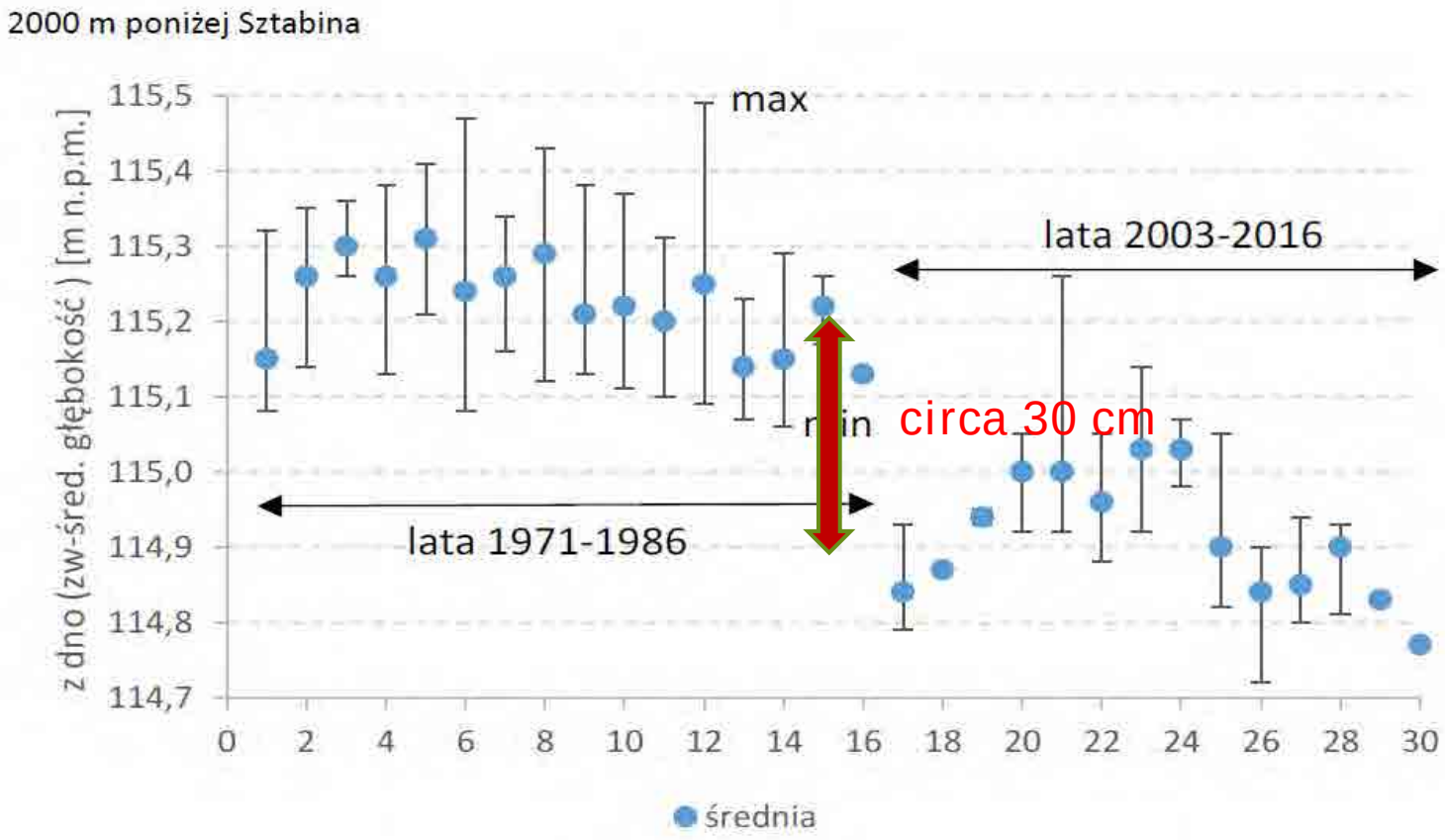
(Grygoruk et al., 2015)

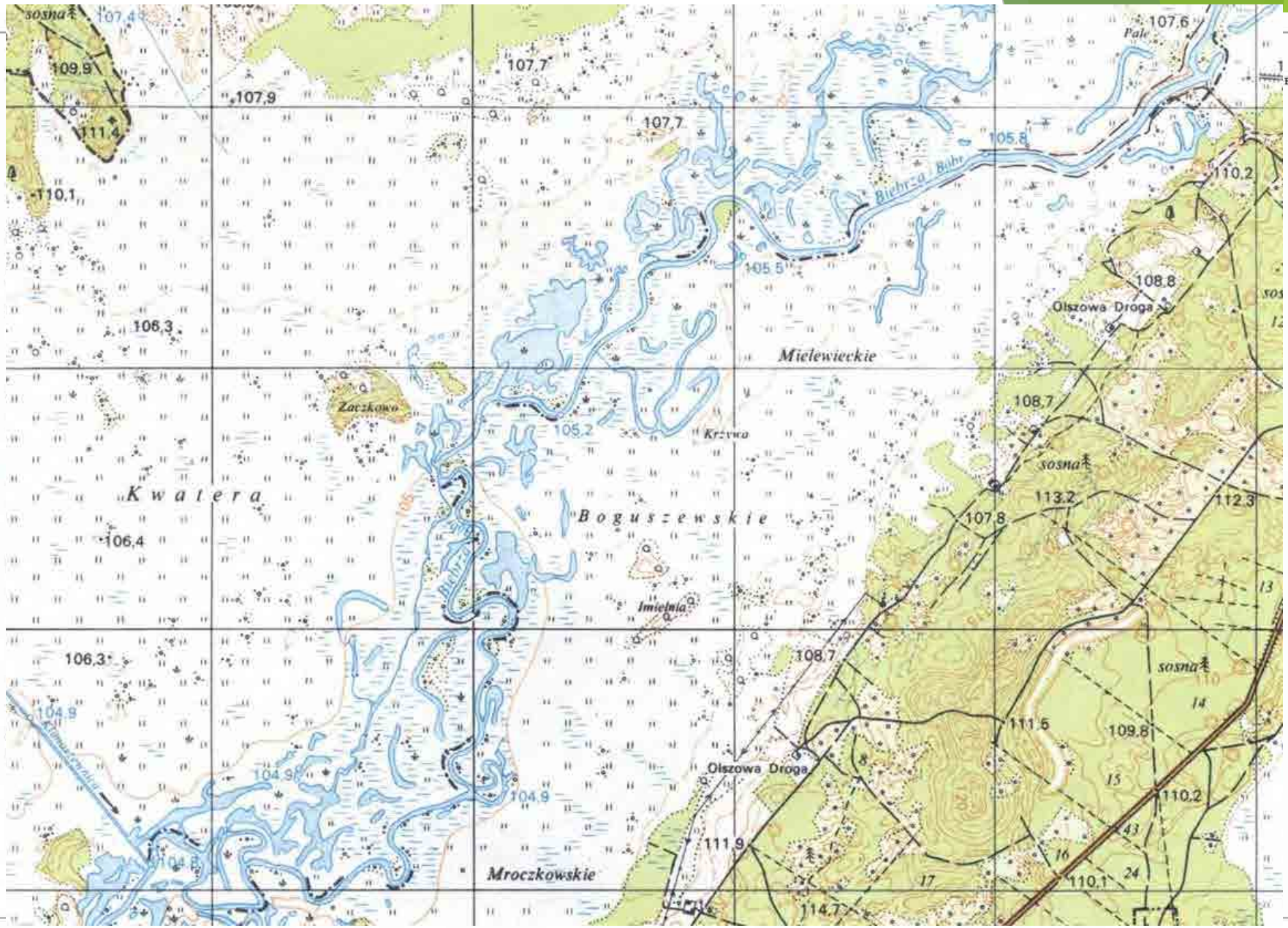



Wetlands issues:

- For groundwater fed wetlands we should decrease river network density. It is often part of trade-offs
- Vertical (dis)connectivity results from bed erosion threats throughflow fens
- Horizontal connectivity means more for riparian wetlands
- Old infrastructure and new challenges

Biebrza National Park - cont

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Pale
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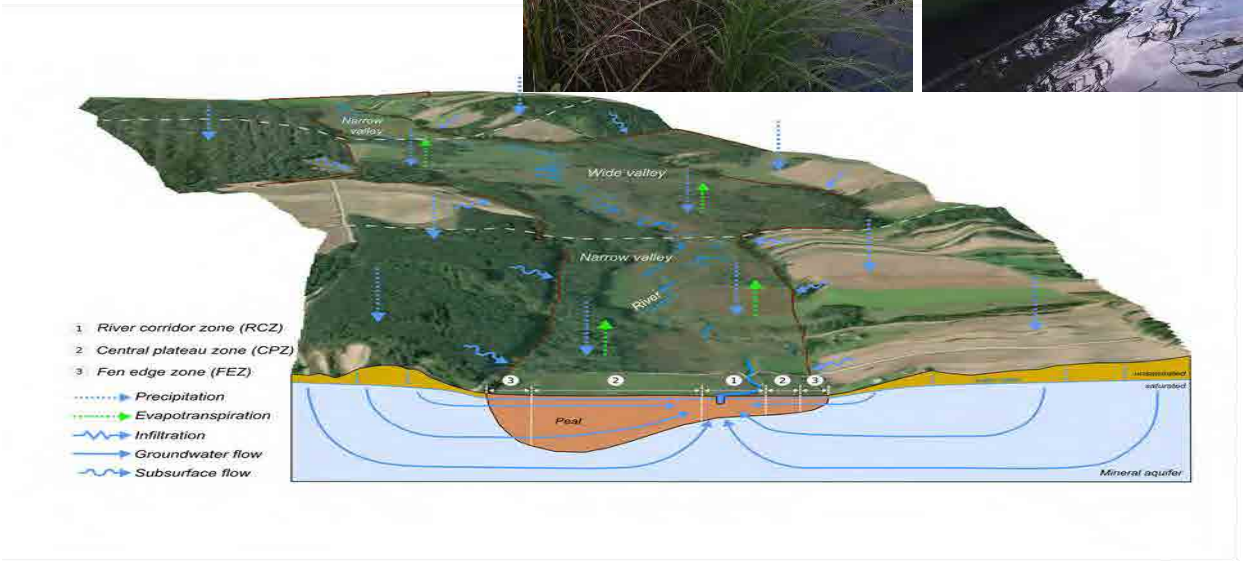
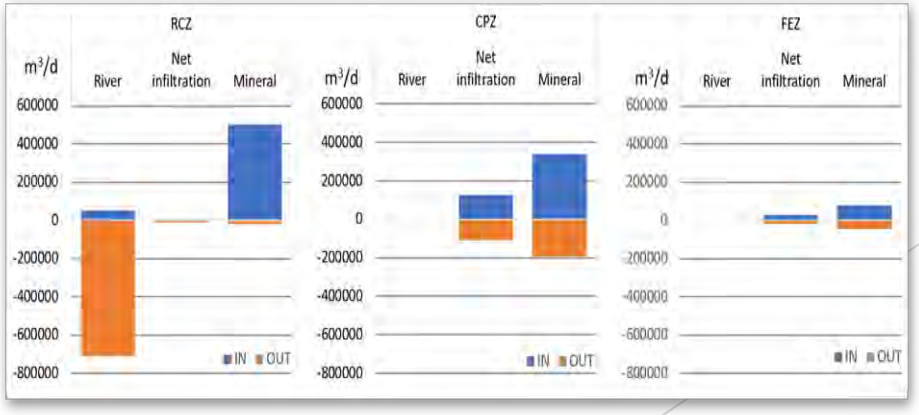
Biehrza
Biehrza
110,2
105,5
108,8
Olszowa Droga
106,3
Mielewieckie
Zaczkowo
105,2
Krzywo
108,7
sosna
Kwatera
Boguszewskie
113,2
112,3
107,8
106,4
Imielnia
106,3
108,7
sosna
104,9
111,5
109,8
Olszowa Droga
104,9
104,9
110,2
111,9
Mroczkowskie
110,1
114,7

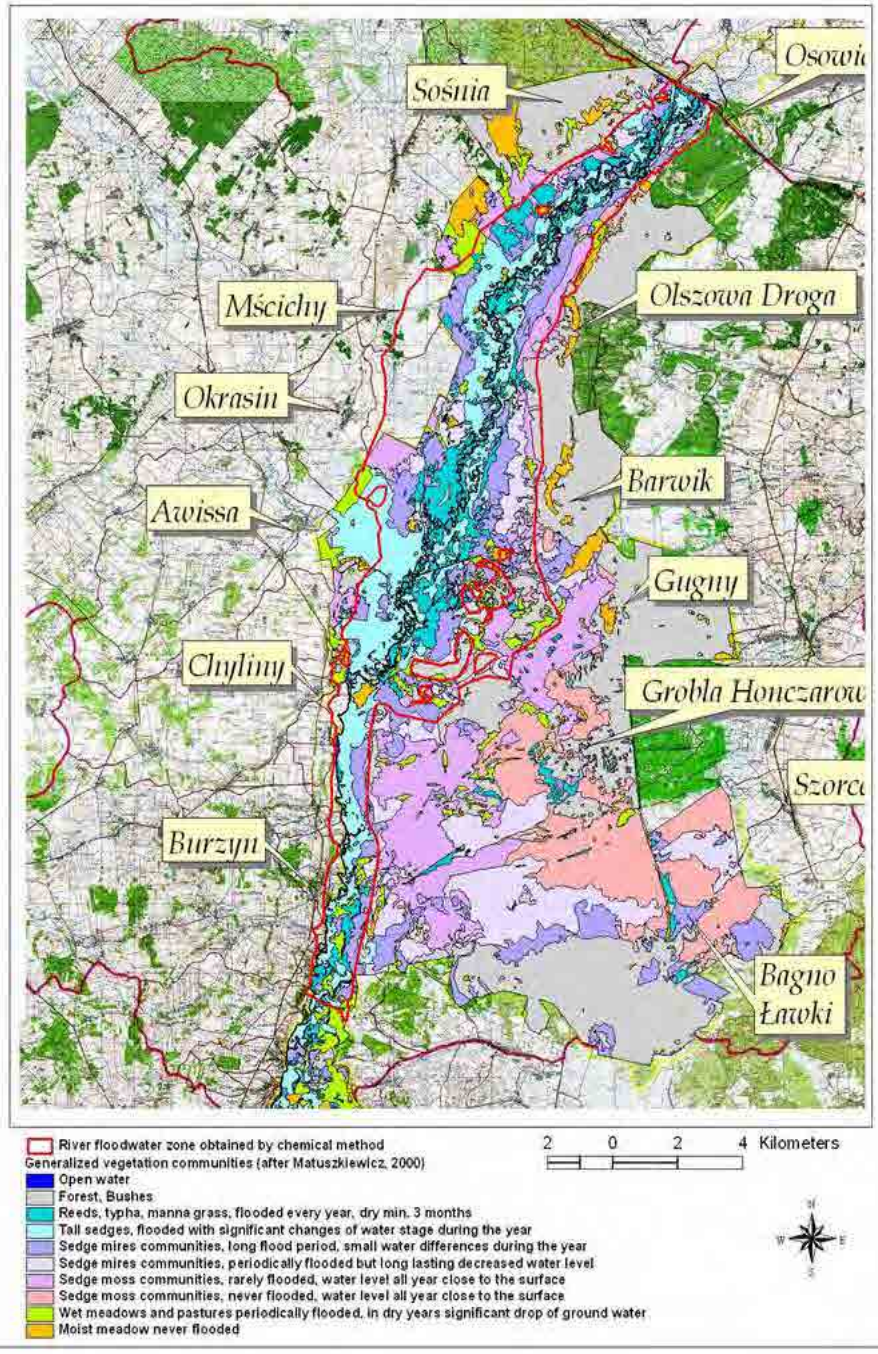
Natural, overgrown river protects fen in the cost-effective way.





Wetlands issues:

- For groundwater fed wetlands we have to decrease river network
- Vertical (dis)connectivity results from bed erosion threats throughflow fens. It is Europe wide, growing and significant challenge for rivers and wetlands conservation
- Horizontal connectivity means more for riparian wetlands
- Old infrastructure and new challenges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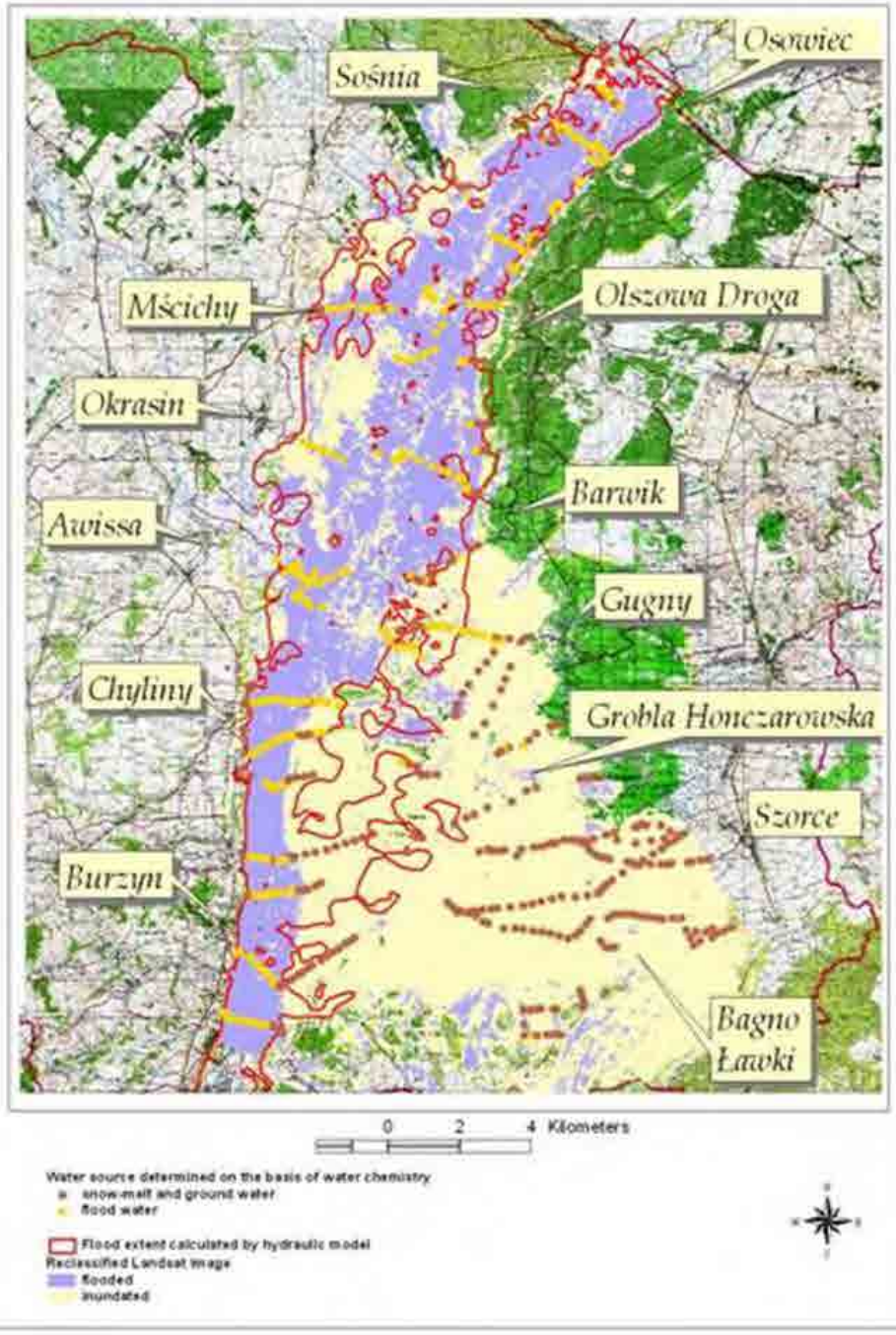
Osowi
Mścichy
Olszowa Droga
Okrasin
Barwik
Awissa
Gugny
Chyliny
Grobla Honczarow
Szorc
Burzyn
Bagno
Ławki
River floodwater zone obtained by chemical method
Generalized vegetation communities (after Matuszkiewicz, 2000)
Open water
Forest, Bushes
Reeds, typha, manna grass, flooded every year, dry min. 3 months
Tall sedges, flooded with significant changes of water stage during the year
Sedge mires communities, long flood period, small water differences during the year
Sedge mires communities, periodically flooded but long lasting decreased water level
Sedge moss communities, rarely flooded, water level all year close to the surface
Sedge moss communities, never flooded, water level all year close to the surface
Wet meadows and pastures periodically flooded, in dry years significant drop of ground water
Moist meadow never flooded
2 0 2 4 Kilometers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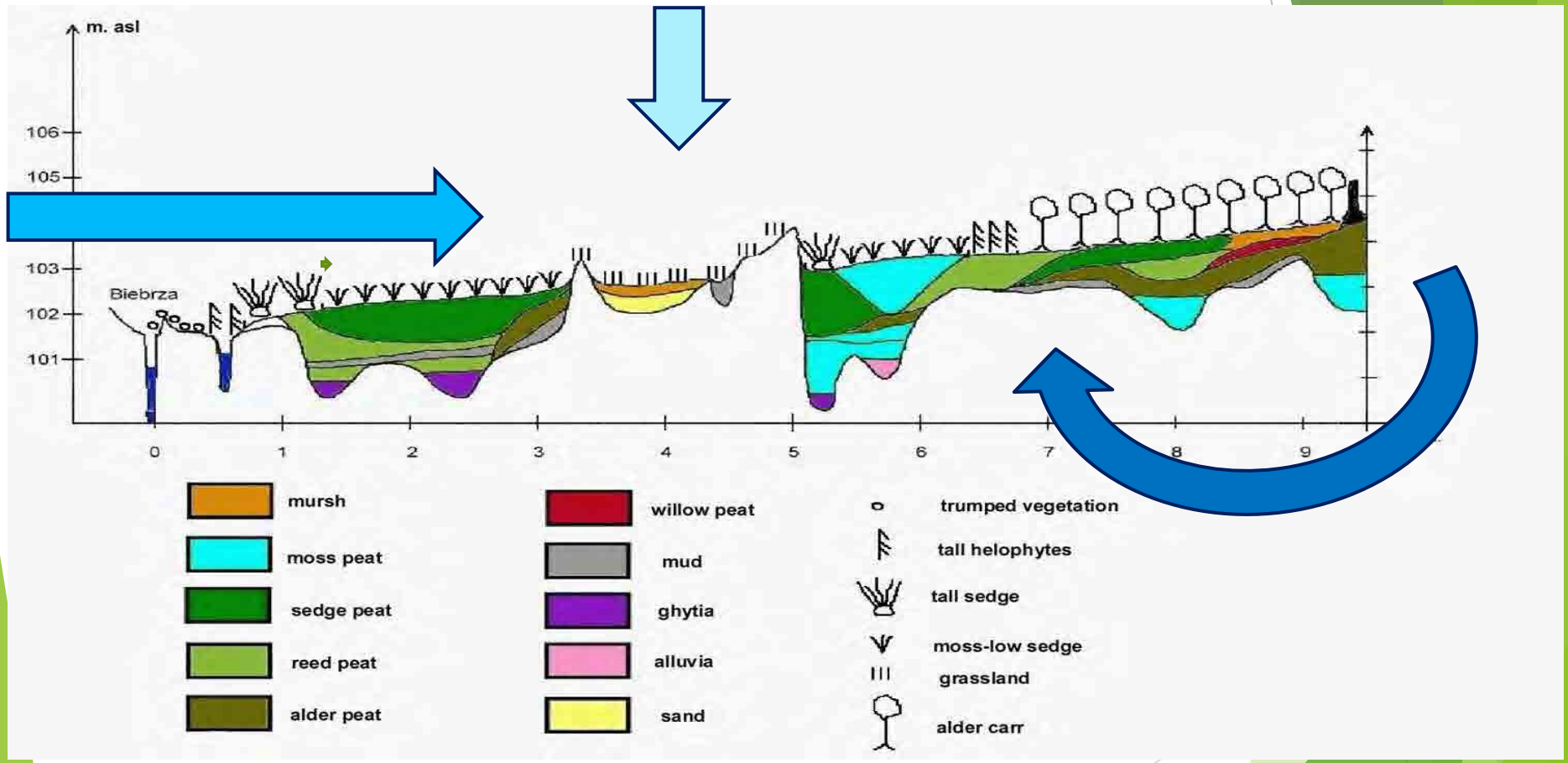
Osowiec
Mścichy
Olszowa Droga
Okrasin
Barwik
Awissa
Gugny
Chyliny
Grobla Honczarowska
Szorce
Burzyn
Bagno
Ławki
0 2 4 Kilometers
Water source determined on the basis of water chemistry
snow-melt and ground water
flood water
Flood extent calculated by hydraulic model
Reclassified Landsat image
flooded
inundated

Water sources:

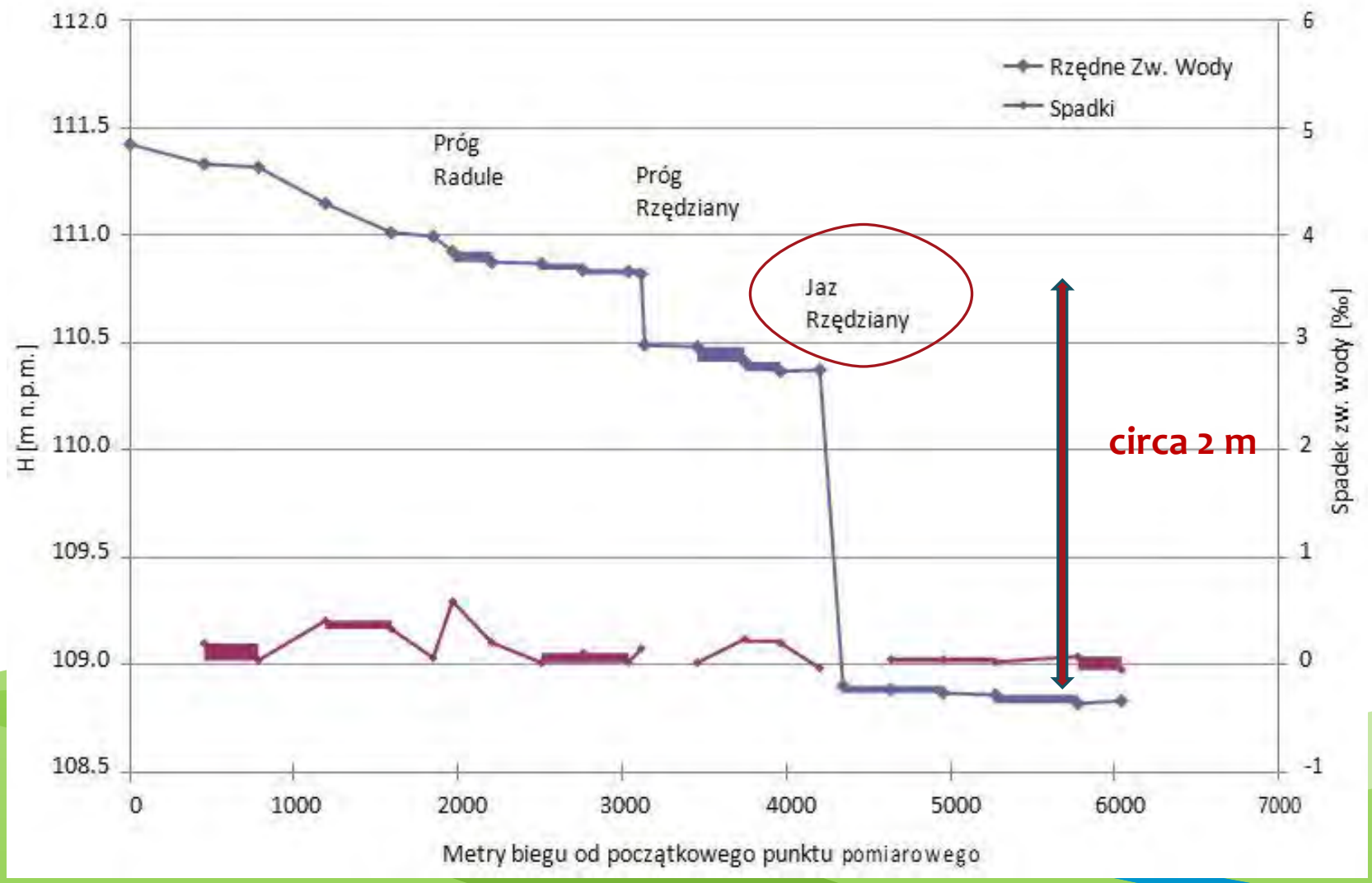


Wetlands issues:

- For groundwater fed wetlands we have to decrease river network
- Vertical (dis)connectivity results from bed erosion threats throughflow fens
- Horizontal connectivity means more for riparian wetlands. In restoration we can gain significant improvement in habitats quality by reaching valley margin
- Old infrastructure and new challenges

Narew National Park NE Poland

Role of the weir (jaz Rzędziany)



Wetlands issues:

- For groundwater fed wetlands we have to decrease river network
- Vertical (dis)connectivity results from bed erosion threats throughflow fens
- Horizontal connectivity means more for riparian wetlands
- Old infrastructure and new challenges. If temporary needed, we should take care on maintainence, improvements and management rules.

Conclusions - it is all about connectivity

- For groundwater fed wetlands we have to decrease river network
- River bed erosion threats throughflow fens
- Riparian wetland is often supplied from different sources of water
- Old infrastructure and new challenges

Advancing Freshwater Ecosystem Restoration

25 years of ECRR as a catalyst for river restoration in greater Europe

Martin Janes
Chair ECRR & Managing Director UK RRC

The network for best practices of river restoration in Greater Europe

ECRR
European Centre for River Restoration

Early Ecosystem Restoration advocates

Late 90's - ECRR focuses on restoring river Ecology and Morphology:

- mostly W. Quality, and Quantity - floods and droughts
- well placed for WFD's "restoration" aims

Connecting countries & sharing the best of what Europe had to offer:

- small international events – study tours, seminars, technical information..
- putting river managers in touch with each other across countries
- sharing information and examples to progress national strategies

A network of members working together

ECRR – An association of NGO RR Centres, Agencies, national Institutes, international freshwater organisations.

- To encourage and support ecological river restoration throughout greater Europe.
- To help to establish new national centres.
- Independent, free to voice its opinions, independently of the interest of partners and supporters

Reputation, Influence & Impact

25 yrs - independent, impartial, supporting others to enact change

- Encouraging all countries at whatever their stage in river restoration
- Reaching out – Across Europe+ and Asia, Australia, USA…
- Trusted Partner – LIFE, Interreg, Horizon, etc.. - Restore, MICS, LIFEDordogne, ResiRiver, EcoAdvance, ..
- Trusted Advisor - Reform, Open Rivers, Merlin, ...
- Trusted Facilitator - ISRivers, Euro-INBO, national conferences…
- Trusted Network – Sharing best practices e.g. European/International River Symposia

Informing big decisions – experiences & insight

- ECRR's submission to the EC's WFD Fitness Check

  Improvements can be made by the national governments

- ECRR's statement on the EC Biodiversity Strategy 2030

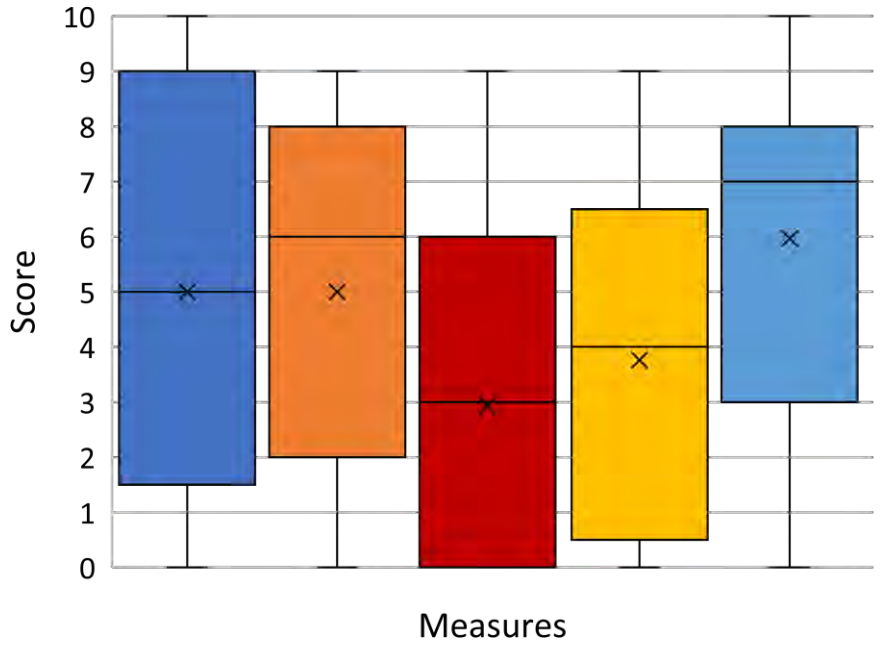
  ECRR will support the European Commission and the Member States in achieving the target of 25,000 km of restored free flowing rivers

- ECRR's Feedback on the EC Regulation on nature restoration

  Development of practical metrics, concrete prioritisation tools and pragmatic guidance for barrier removal for free-flowing rivers

Focussing on the critical questions
E.g. – restoring river continuity

30 countries: which measures are applied to restore river continuity?



- Barrier removal
- Constructing a barrier bypass channel
- Lowering the barrier
- Structural modification to improve environmental or ecological flows
- Adding a fish passage

ECRR

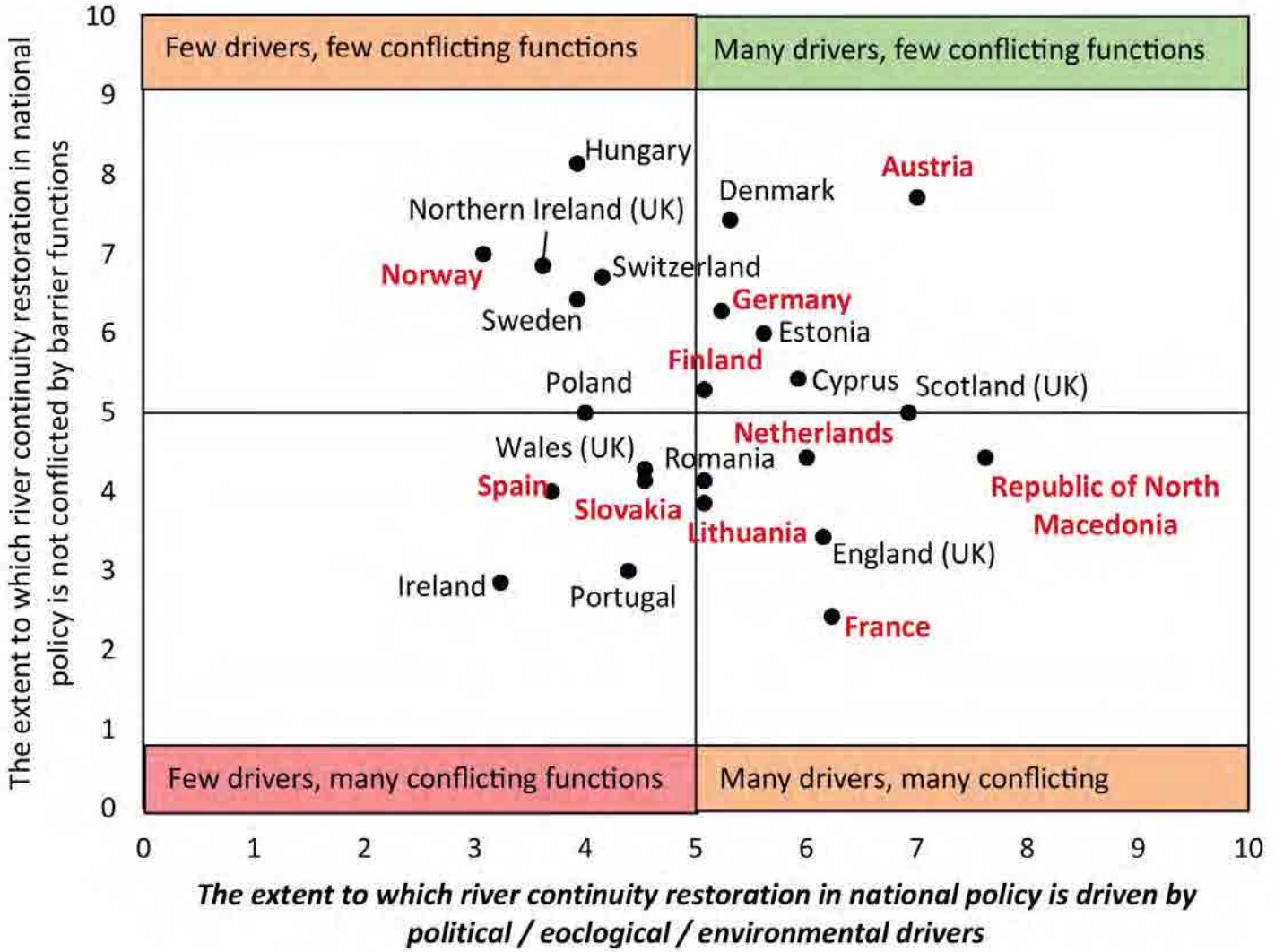
stowa

A pan-European survey
to strengthen and improve policies and strategic planning regarding river continuity restoration

ECRR

stowa

A pan-European survey
to strengthen and improve policies and strategic planning regarding river continuity restoration



In depth study of laws and interviewing 10 MS. Policymakers, planners and policy implementers by Clara Schmidt, STOWA.
Publication: Clara Schmidt and Bart Fokkens, ECRR.

Information & communication

- A publication for practical successes,
- Keeping the network informed,
- In-depth discussions,
- Demonstrating widespread views,
- Encouraging others.

Technical newsletters

ECRR Technical Newsletter 2 - 2023, December

Published: 14-12-2023

In this edition, too, the three articles presented are very different in nature. The first article describes how Norway has implemented ... read more

ECRR Technical Newsletter 1 - 2023, June

Published: 27-06-2023

Similarities and differences as well as completeness and effectiveness of the single policies were identified to determine if it is possible to create a general policy framework for river... read more

ECRR Technical Newsletter 2 - 2022, December

Published: 11-12-2022

The ECRR would like to reiterate that its members are excited to see that the proposed EU Nature Law emphasises the restoration of freshwater ecosystems, which are one of... read more

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RESTORE partnership
European River Restoration website

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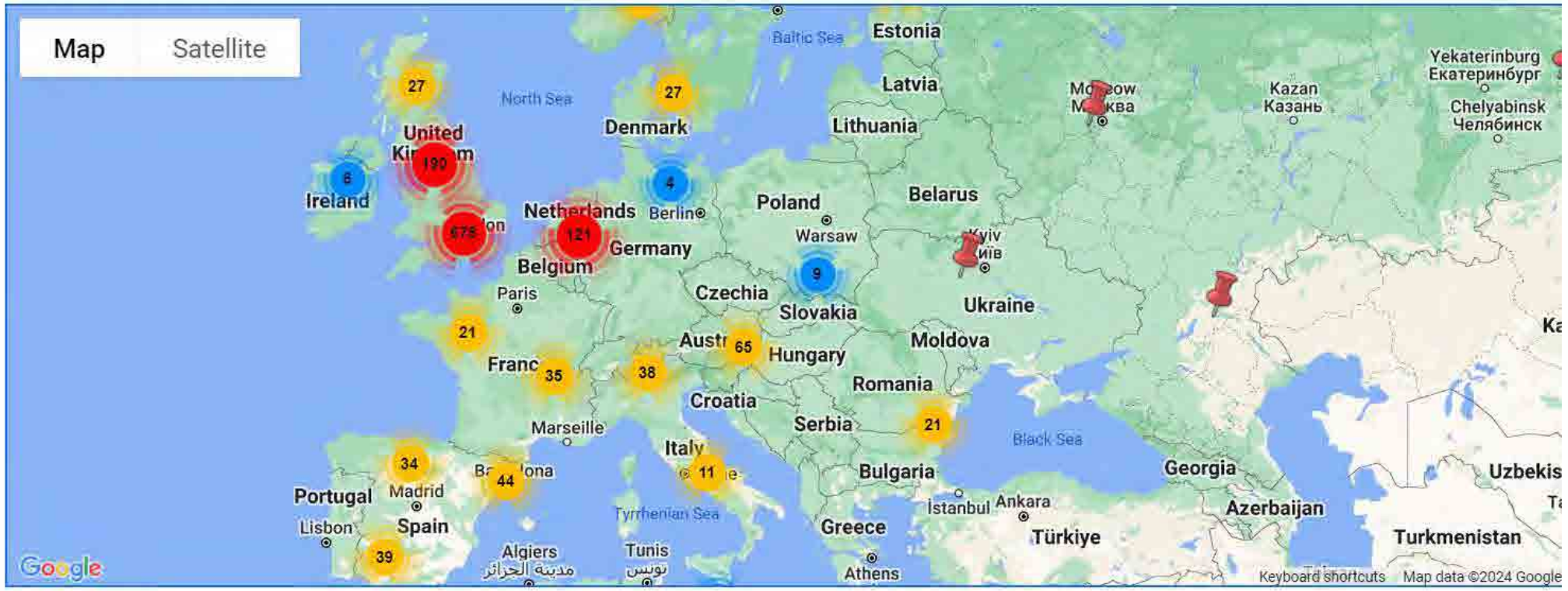
River restoration case studies – the RiverWiki

Welcome to the river restoration case studies **RiverWiki**. This site is funded through the **Environment Agency** (England) and managed by **the RRC** (UK). **This is an interactive source of restoration schemes from around Europe**

Up to now, the database holds **1473** river restoration case studies from **31** countries

Map of case studies

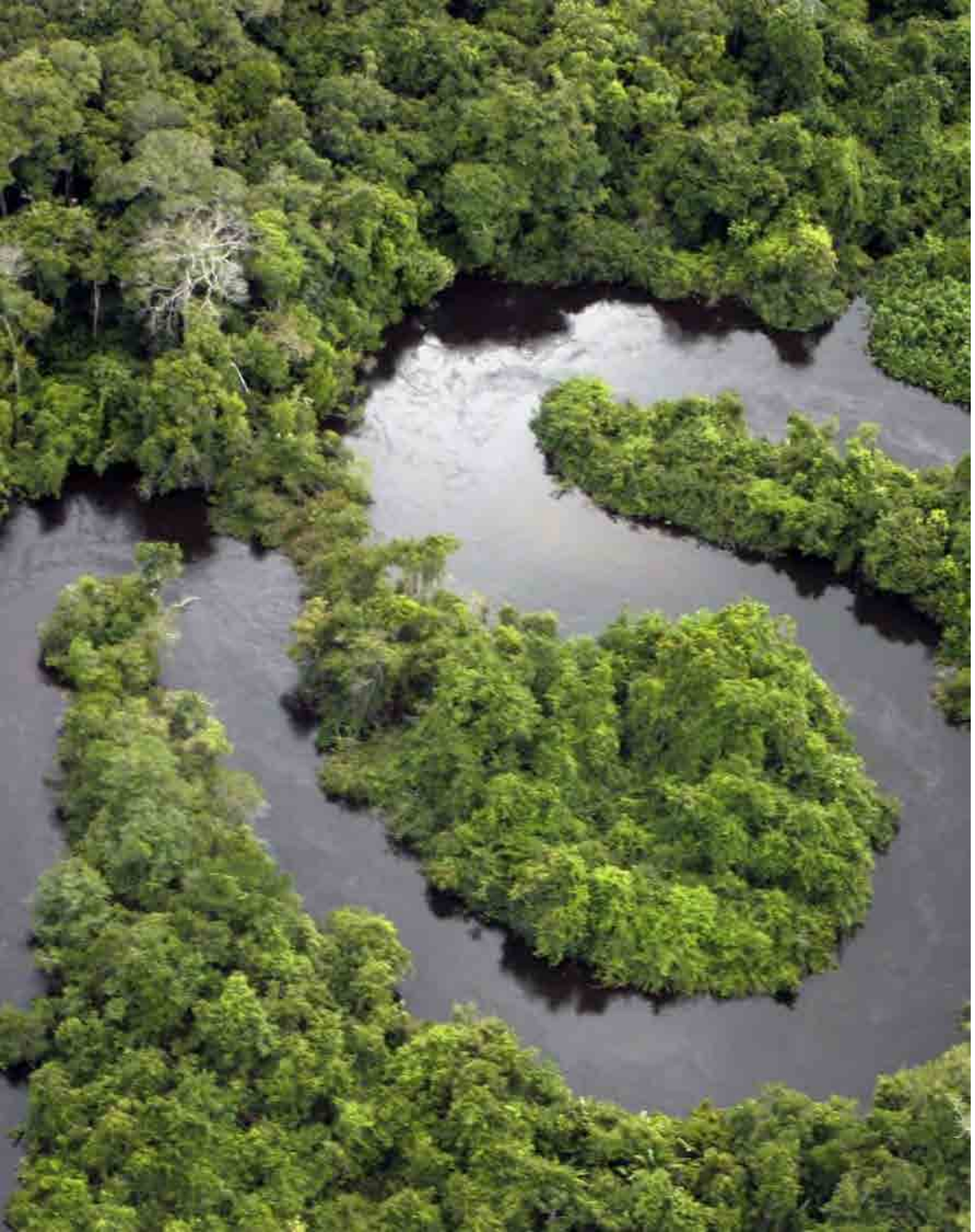


ECRR Association (Members / Partners + Secretariat)

EU and National governments on river restoration policy implementation	Organisations promoting river restoration
Information and knowledge exchange between members and partners	Information and knowledge exchange in wider practitioners network
European River Restoration Community	International River Foundation / International River Symposium

ECRR 25 years

Thank you for your involvement



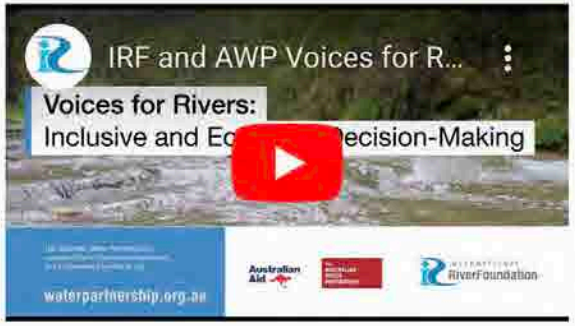
Voices For Rivers

INTERNATIONAL RiverFoundation

The IRF and Australian Water Partnership First Nations Voices for Rivers series

Video 1: Embedding Indigenous Knowledge And Tools

Video 2: Inclusive And Equitable Decision Making



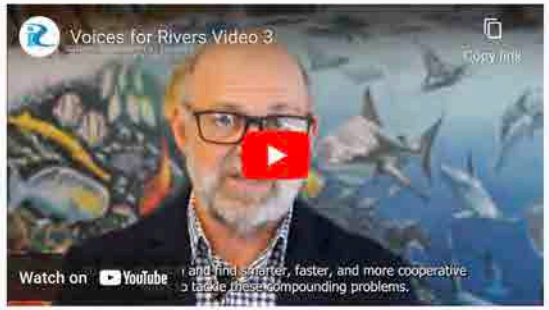
Video 3: Implications Of Climate Change On Indigenous Communities

The Voices for Rivers series

Video 1: Transboundary River Governance

Video 2: Mina Guli

Video 3: Transboundary River Governance



Video 4: 20 Years Of Action For Rivers

INTERNATIONAL RiverFoundation

Rivers are more than just a conduit for water.

Rivers are the lifeblood of the land, people, and economies they support.

Cooperation between IRF and ECRR has facilitated restoration and better management of Rivers worldwide.

INTERNATIONAL RiverFoundation

The Thiess International and European River Prize

Many positive examples exist of where communities and institutions have initiated action to restore, protect and effectively manage water and rivers.

IRF has for the past 25 years celebrated some of these and presented them with the Thiess International River Prize.

Cooperation between IRF and ECRR has played a central role in the support of Restoration Internationally and the European River Prize and the European River Symposium 2013, 2014, 2016 and 2022.

INTERNATIONAL RiverFoundation

26th International RIVER SYMPOSIUM

INTERNATIONAL RiverFoundation

Rivers and Climate: Accelerating Solutions and Partnerships

25-27 November 2024 | Brisbane, Australia

Contact

Jodie Bignall (Australia)
IRF CEO
jbignall@thiess.com.au

Eva Abal (Australia)
IRF Strategic Advisor
eva@riverfoundation.org.au

Philip Weller (Austria)
IRF Board Director
philip@riverfoundation.org.au

Olivia Wallace (Australia)
IRF Marketing Officer
olivia@riverfoundation.org.au

INTERNATIONAL RiverFoundation

Advancing Freshwater Ecosystem Restoration

ECRR Heritage, Prospects and Thanks!

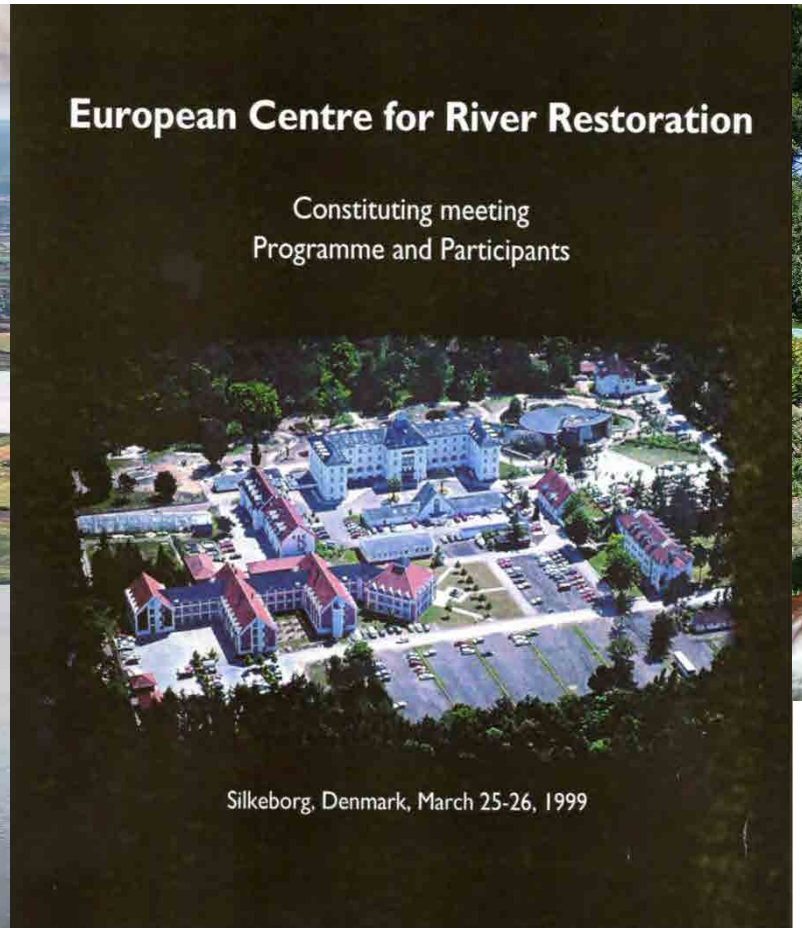
Bart Fokkens
ECRR Coordinator

The network for best practices of river restoration in Greater Europe

ECRR
European Centre for River Restoration

25 March 1999, NERI, Silkeborg, Denmark

Start of the LIFE Project European Centre for River Restoration
Main initiator and founder Torben Moth Iversen, Deputy Director NERI



The network for best practices of river restoration in Greater Europe
ECRR
European Centre for River Restoration

The Network for Best Practice River Restoration in Greater Europe

- **To encourage and support ecological river restoration:**

  Institutional: (national) networks, topic centres, organisations and institutions

- **Connecting people and organisations**

  Social:(national) river restoration centres, practitioners networks, and key partners

- **Supporting development of best practices**

  Infrastructural: shared knowledge development, dissemination of information, case studies and RiverWiki

The network for best practices of river restoration in Greater Europe

ECRR

European Centre for River Restoration

ECRR Secretariat and Chair

Secretariat

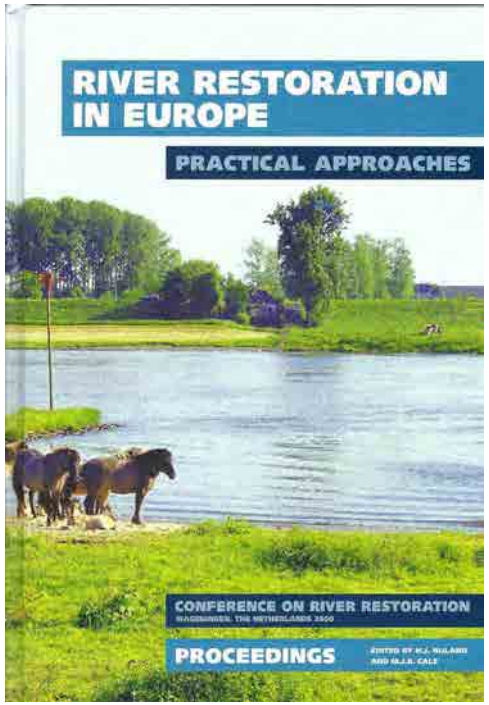
- 1999 – 2002: NERI/DK.
- 2002 – 2006: RIZA/NL
- 2007 – 2009: CIRF/I
- 2010 – 2014: Dutch Government Service for Land and Water Management (DLG)/NL

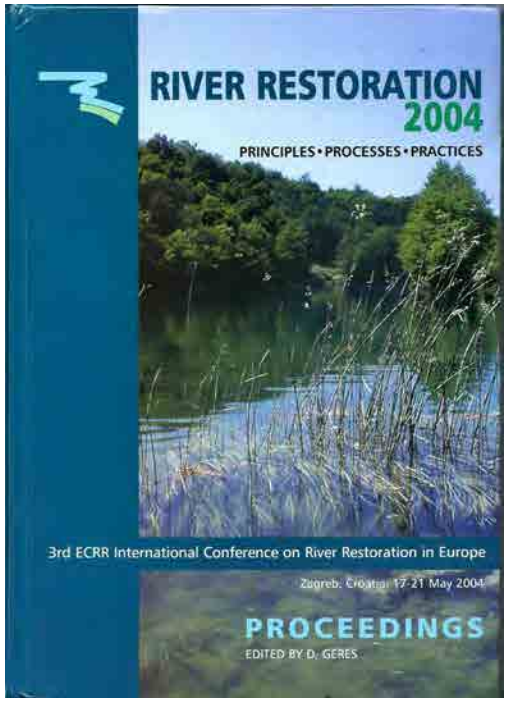
- **2017- Present: Association ECRR**

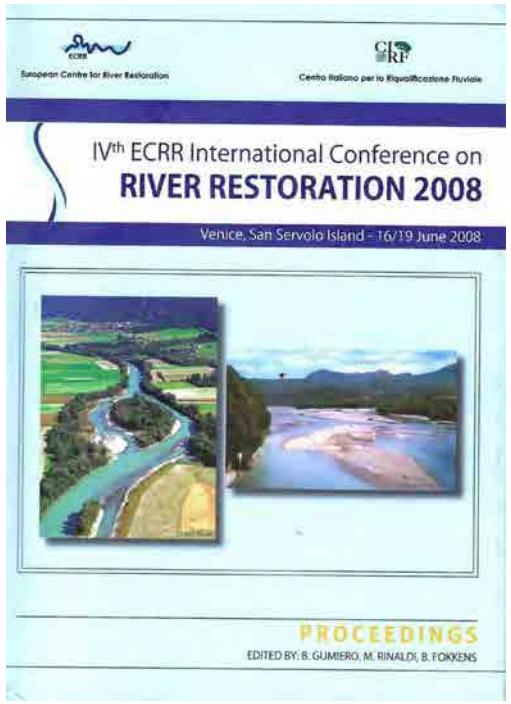
Chair

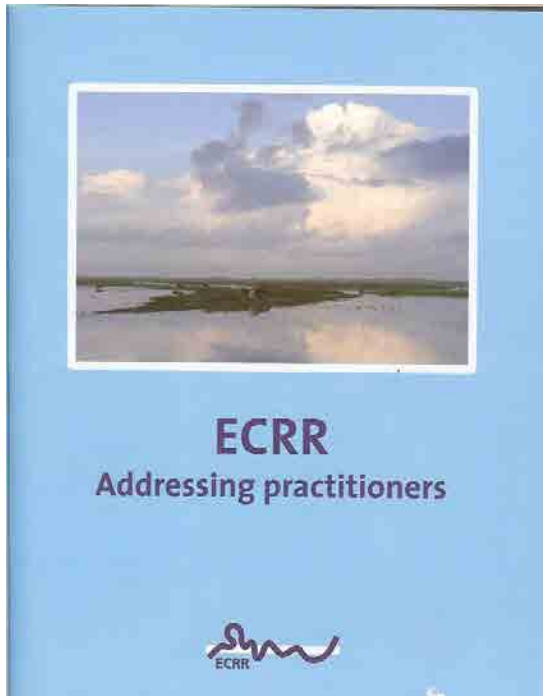
- 1999 – 2004: Torben Moth Iverson NERI/DK
- 2004 –2016: Bart Fokkens Min. Water NL (till 2010)
- 2017- Present: Martin Janes RRC UK
- 2017-Present: Treasurer Jukka Jormola Syke (till FI 2022)
- 2017-Present; Coordinator Bart Fokkens

International River Restoration Conferences









Wageningen Netherlands 2000 Zagreb Croatia 2004 Venice Italy 2008

The network for best practices of river restoration in Greater Europe
ECRR
European Centre for River Restoration

ECRR ‘Members’ and Practitioners Network till 2017

- NERI Denmark
- EA / RRC UK
- Min. Water / STOWA Netherlands
- Italian River Restoration Centre
- Min. Water Romania
- National Water Institute Russia
- SYKE (EI) Finland
- Iberian River Restoration Centre
- INBO France
- Wetlands International Netherlands
- EA Norway
- Warsaw University of Life Sciences Poland
- National Water Institute Ukraine
- I.S. Rivers, France
- GWPCEE

Regional workshops / Seminars

- Finland, Helsinki
- Hungary Budapest
- France, Paris
- Spain, Madrid
- Russia Ekaterinburg
- Venice, Italy
- UK, Chester
- UK, Londen
- Vienna, Austria
- Slovenia, Ljubljana
- Spain Leon
- Armenia Aras River
- Netherlands, Lelystad

The network for best practices of river restoration in Greater Europe

ECRR

European Centre for River Restoration

Restoring Europe's Rivers

RESTORE

partnership for sharing knowledge & promoting best practice on river restoration in Europe

The RESTORE project is made possible with the contribution of the LIFE+ financial instrument of the European Community

and works in partnership with

Ecosystem services

Maintenance / improvement water quality

Water storage

Transport of wastewater

Hydropower generation

Drinking water

Fisheries

Irrigation water

Groundwater recharge

- Flora and fauna / biodiversity
- Carbon fixation
- Recreation
- Water transportation
- Water security
- Maintenance of food chain
- Dispersal of seeds and plants
- Economic welfare
- Psychic and spiritual welfare

Restoring Europe's Rivers

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RESTORE partnership
RESTORE web site

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Main Page

Welcome to the river restoration case studies RiverWiki. This tool is for sharing best practices and lessons learnt for policy makers, practitioners and researchers of river restoration.

This is an interactive source of information on river restoration schemes from around Europe!

Up to now, the database holds **489** river restoration case studies from **24** countries

HAVE YOUR SAY, we are happy to receive any suggestions for improvements to the site please contact us.

The RiverWiki has been developed by the RESTORE partnership for sharing knowledge and promoting best practice on river restoration. Read more on the RESTORE partnership.

Contents [hide]
1 Map of case studies
2 Countries
3 Search
4 Create a case study
5 Other resources
6 Contacts

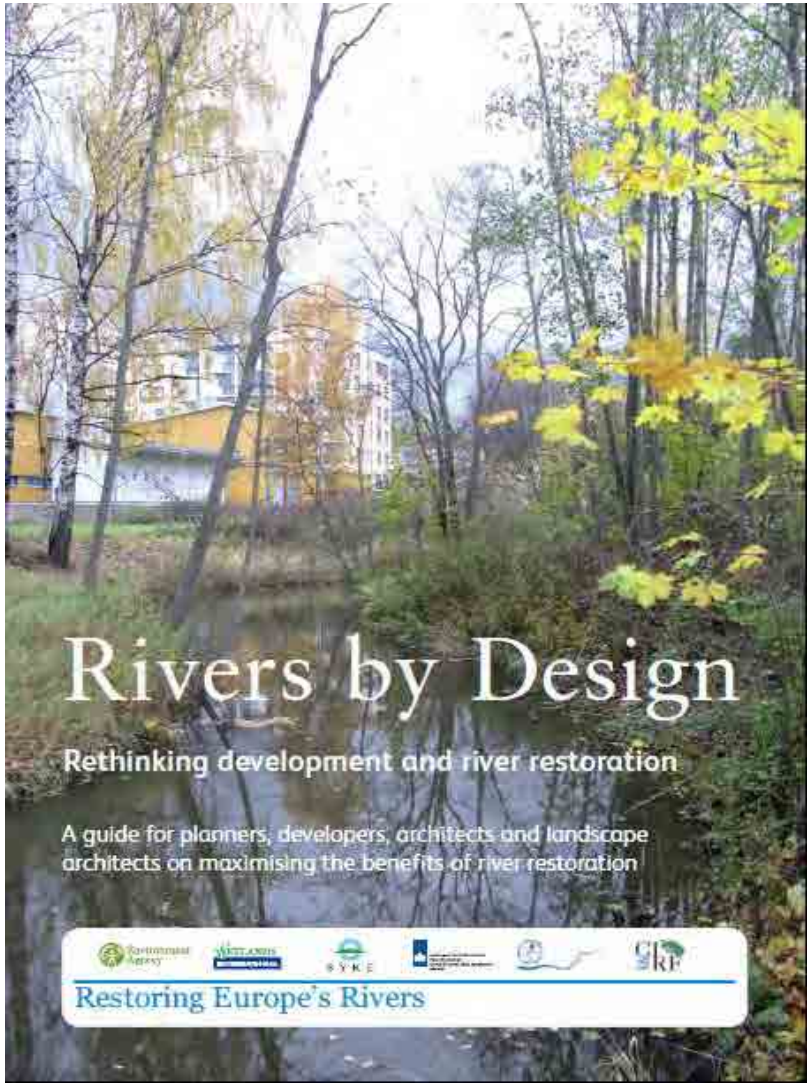
Latest updated case studies	Modification date	Country
Rheinfelden bypass	5 November 2013 13:17:36	Germany Switzerland
Stora, Holstebro HEP station	5 November 2013 09:26:46	Denmark
SEE River Project	5 November 2013 07:32:31	Albania Austria Bosnia and Herzegovina Croatia Hungary Italy Romania Serbia Slovakia Slovenia
Habitat improvement project in Segre river, in Alòs de Balaguer	4 November 2013 23:26:17	Spain
Demolition of weir on the River Nora, Nalón Basin	4 November 2013 23:14:14	Spain
more...		

Map of case studies

The network for best practices of river restoration in Greater Europe

ECRR European Centre for River Restoration

Restoring Europe's Rivers



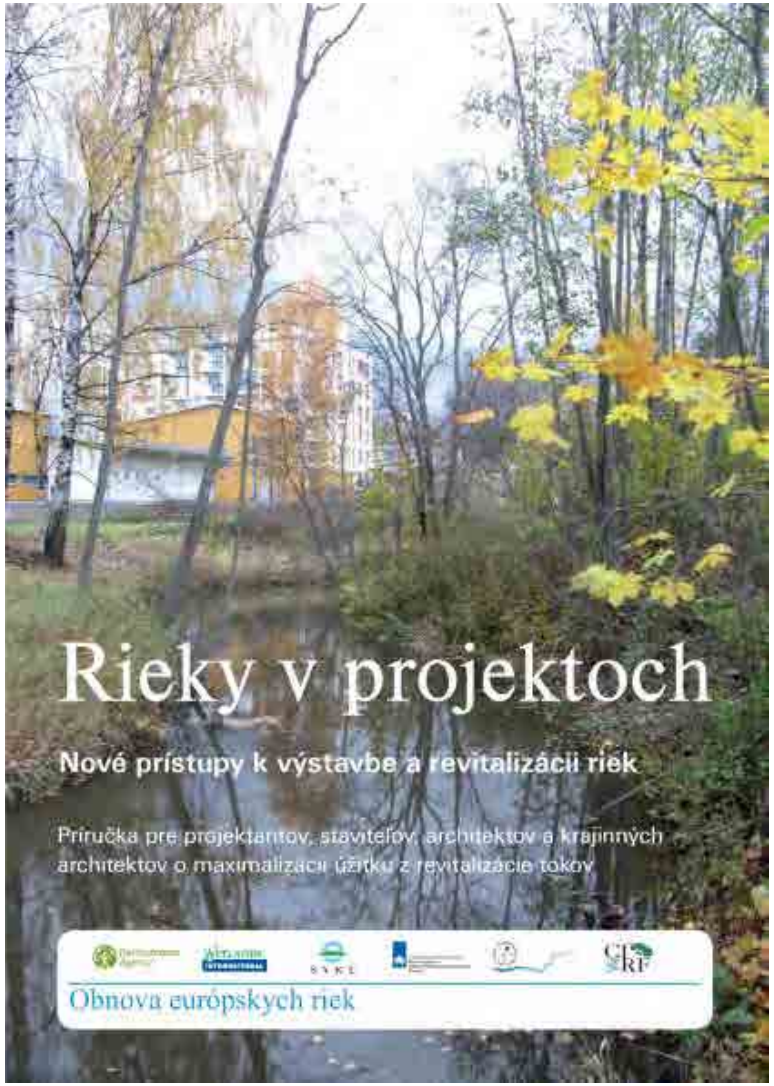
RESTORE:

One of the 12

'Best of the Best'

2014 EU LIFE ENVI Projects

Very much new information and an enormous outreach.



ECRR / RESTORE Core Group Vienna 2013


5th EUROPEAN RIVER RESTORATION CONFERENCE
VIENNA
11-13 09 2013
CELEBRATING SUCCESSES
&
ADDRESSING CHALLENGES
HYDRO ELECTRICITY
FORESTRY
SPAWNING GROUNDS
IRRIGATION
AGRICULTURE
DECISION MAKING
PRACTICE
BOTTOM UP
RIVER CORRIDOR MANAGEMENT
POLICY MAKING
2015
CROSS-BORDER POLITICS
INDUSTRY
SHIPPING & NAVIGATION
"THE RIVER IS ITS OWN BEST CARPENTER"
FARMING
TOP SOIL
RECREATION
ERRC
RIVER RESTORATION
FLOOD RISK PROTECTION
URBAN AREAS
THREATS & NEEDS
RETENTION BASIN
MULTI-USE LANDSCAPES
NATURAL ECOSYSTEM
DYNAMIC ASPECTS
SEWAGE TREATMENT
BIOLOGICAL DEATH
CONFERENCE-EXCURSIONS
CHRISTIAN RIDDER

ECRR Members and Practitioners Network after 2017

Formal Association in 2016!
Previous members plus:

- World Fish Migration Foundation / Dam Removal Europe
- EA Sweden
- Finnish Freshwater Foundation
- Blue Rivers Foundation

Most members have a (national) practitioners network!

ECRR International Practitioners network

- Greater Europe 1350
- Outside Europe 400

- eNews 6 – 8 issues per year
- Technical Newsletter 2 -3 p/y
- Website / knowledge base

The network for best practices of river restoration in Greater Europe
ECRR
European Centre for River Restoration

ECRR unites thousands of people fostering healthier freshwater ecosystems!

Vienna Conferences

- 2013 5th European River Restoration Conference (RESTORE) ***)**
- 2014 6th European River Restoration Conference (ECRR-IAWD-WWF Austria) ***)**
- 2016 European River Symposium (IAWD-ECRR)*)
- 2021 European River Symposium (IAWD-WWFCEE-ECRR) ***) Online**
- 2022 International River Symposium (IAWD-IRF) ***)**

***) IRF European RiverPrize Rhine, Mura, Segura, Cumbrian Rivers**

Participants average 250 per conference.

All conferences with various partners.

With extensive reporting and communications on outputs and results.

More and more mainstreaming river restoration, especially 2021.

Other Major Events

- WWF 2012 Nice, France with an ECRR Session on Integrated River Basin Restoration
- Annual EUROPE – INBO Conferences with a INBO – ECRR Workshop
- Several (annual) National Events by ECRR Members often with ECRR contributions

and

- Growing interest from other sectors, in particular the hydro-power in ECRR activities and cooperation.

Future Directions

EC Biodiversity Strategy 2030

EC Farm to Fork Strategy

EU Nature Restoration Law ?

Water Framework Directive ?

UN Decade on Ecosystem Restoration 2021- 2030

ECRR Prospects

- 1999-2024: 25 adventures years with ups and downs
- ECRR's continuity was and is never guaranteed
- Climate change (adaptation) is now the most important driver for (freshwater) ecosystem restoration
- Resilient rivers and mitigation measures
- ECRR should also adapt to climate change
- Focus still on river restoration information and knowledge exchange

Who can become a member of the ECRR?

Non-commercial organisations working on the development of best practice for river restoration, knowledge sharing and (international) cooperation can become a **member of the ECRR Association**. For more information on ECRR membership, we invite you to scan the QR code below and/or to contact us by email: **Secretariat@ECRR.org**.

What do we do?

- Connect people and organisations
- Disseminate river restoration information and knowledge
- Support the development of best practices of river restoration

www.ecrr.org

secretariat@ecrr.org

The ECRR association member and partner organisations:

I.S. Rivers · OFB Office Français de la Biodiversité · Norwegian Environment Agency · CIRF Centro Italiano per la Riqualificazione Fluviale · SYKE Finnish Environment Institute · Suomen Vesistösäätiö · stowa · IBMiM · Warsaw University of Life Sciences · International Network of Basin Organisations · Wetlands International · CIREF Centro Ibérico de Restauración Fluvial · Global Water Partnership · Blue Rivers Foundation · Swedish Agency for Marine and Water Management · European Centre for River Restoration

The network for best practices of river restoration in Greater Europe

ECRR

European Centre for River Restoration

Does your organisation work on the **ecological restoration** of rivers?

Join the ECRR.

Learn from the experiences of others.
Share your knowledge. **Discover** the best practices for river restoration.
Get in touch with other practitioners.

The network for best practices of river restoration in Greater Europe

ECRR

European Centre for River Restoration

What does the ECRR offer to its members?

The opportunity to learn and define **best practices** of river restoration for improved implementation.

A **diverse range** of approaches and **ideas**, helping to broaden one's perspective.

Creating and promoting opportunities **for networking** to learn and share knowledge.

Initiatives for members to **collaborate working** on important common topics.

The **RiverWiki**, an interactive database with more than 1000 projects' data.

Policy studies, policy briefs and reviews **to support policy makers.**

For example:

Natural Water Retention Measures, Nature Based Solutions and Free-Flowing Rivers

Development or adjustment of national restoration policies, integrated river basin restoration planning and implementation

The European River (restoration) symposia and conferences ECRR (co) organises and members participate in and contribute to

The ECRR's submissions to the EC's WFD Fitness Check, to the EC's draft Biodiversity Strategy 2030 and Free-Flowing Rivers Guidance and the draft Restoration Law

Project information such as objectives, techniques, costs, ecosystem benefits, monitoring results and outcomes

River continuity restoration survey, flood protection policy brief, nature restoration law review, free-flowing rivers guidance, and biodiversity strategy implementation

The ECRR is...

- A formal network of 17 member organisations and key-partners with the mission to encourage and support ecological river restoration.
- A registered NGO to the EC that reports on its activities to the Transparency Register.
- A network of ca. 2,000 river restoration practitioners in greater Europe.
- A knowledge platform and catalyst for river restoration.
- A community of practice of a growing group of river restoration practitioners, who share their passion and who learn together and with others how to do it better.
- Our audiences are practitioners, including river basin managers, consultants, contractors, NGOs and local volunteers.

The network for best practices of river restoration in Greater Europe

ECRR
European Centre for River Restoration

Thank you for the for your attention and cooperation !

The network for best practices of river restoration in Greater Europe

ECRR

European Centre for River Restoration