

RIVER RESTORATION IN EUROPE AND THE EUROPEAN CENTRE FOR RIVER RESTORATION

Bart Fokkens

Chairman European Centre for River Restoration

14 September 2010



PHILIP WELLER

ICPDR SECRETARY



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3

HYMO OBJECTIVES

Danube River Basin District : River and habitat continuity interruptions 2015 (expected improvements)

MAP 28



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4



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HYDROMORPHOLOGICAL ALTERATIONS



icpdr ikkd
International
Commission
for the Protection
of the Danube River
Internationale
Kommission
zum Schutz
des Donau




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STURGEONS



icpdr ikkd
International
Commission
for the Protection
of the Danube River
Internationale
Kommission
zum Schutz
des Donau




Lucrarile peșterice și asociate în acest proiect, pot genera un impact negativ.

STURIONII SUNT ÎN PERICOL!

Lucrarile de dragaj și închidere a brațelor laterale:

1. Lucrarile de dragaj și închidere a brațelor laterale pot genera un impact negativ asupra sturionilor.
2. Lucrarile de dragaj și închidere a brațelor laterale pot genera un impact negativ asupra sturionilor.
3. Lucrarile de dragaj și închidere a brațelor laterale pot genera un impact negativ asupra sturionilor.
4. Lucrarile de dragaj și închidere a brațelor laterale pot genera un impact negativ asupra sturionilor.

Beneficiile economice ale acestui proiect sunt indubitabile. Datorită sedimentării rapide, costurile dragajelor periodice de mentenanță a șenalului navigabil sunt prea mari! Aceste costuri se pot reduce dacă costurile transportului terestru sau costurile de mentenanță a actualului trafic!



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FISH MIGRATION





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FISH PASSAGE




DRAVA RIVER AUSTRIA



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8



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Restoration Danube

National Park Austria



International
Commission
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Hydro power plant Greifenstein




Hydro power plant Freudenau


Hydro power plant Gabčíkovo

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KOSTBARE NATURE FOR GENERATIONEN



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WETLAND RESTORATION

PROJECT BULGARIA




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Kalimok-Brushlen Protected site – 6 000 ha

Kalimok marsh (after restoration) ~ 1 850 ha

Kalimok and Brushlen
former marshes ~ 35 000 ha



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FLOODINGS 2005



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FLOODINGS 2010



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CONSERVATION



MAN AND BIOSPHERE RESERVE CROATIA



Transboundary
co-operation

International
Co-operation



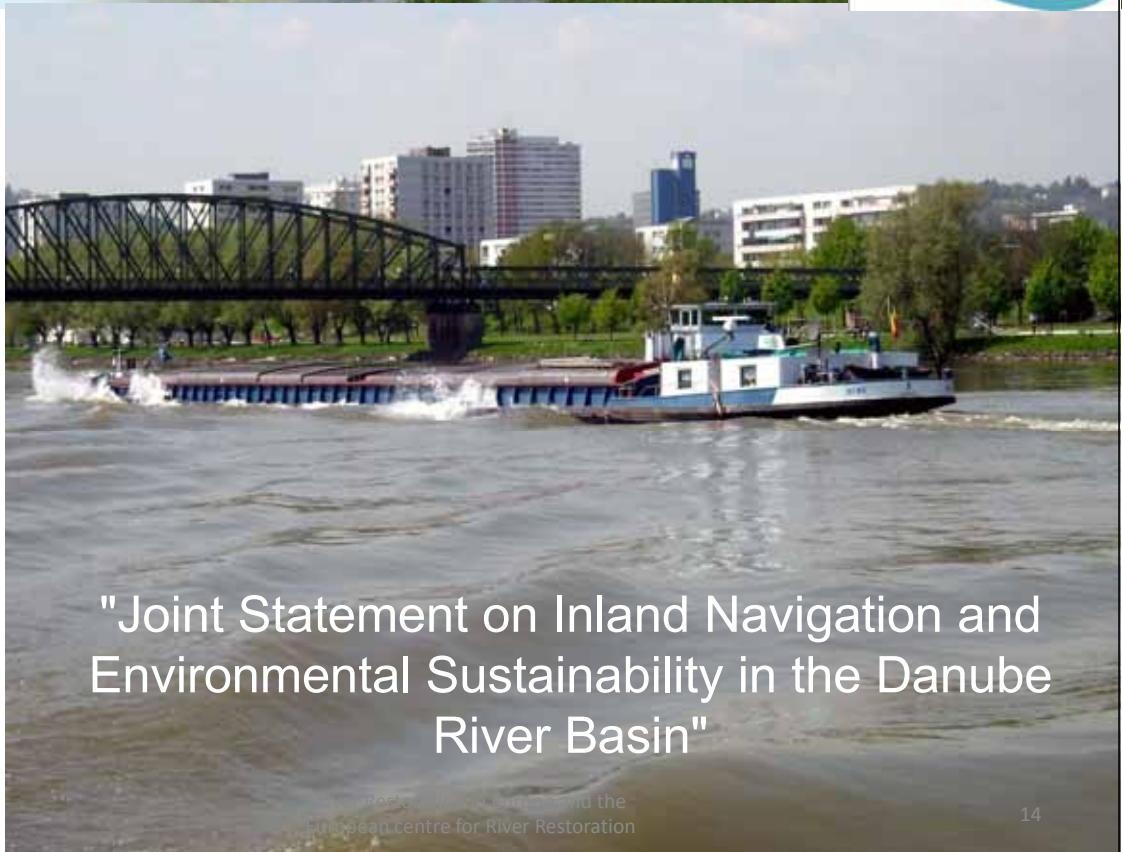
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NAVIGATION AND WFD



"Joint Statement on Inland Navigation and
Environmental Sustainability in the Danube
River Basin"

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RR READY FOR THE FUTURE !

- Expanding to ecosystem approach and ecosystem processes based on hydro-morphological processes
- Definition of criteria for ecological success
- Dynamism as the key feature
- Uncertainty is inherent in ecosystem processes, guided by changing environmental conditions and human activities
- Towards the self-sustaining capacity of rivers and streams
- From the basin to the river via the floodplain: lateral and longitudinal connectivity
- Shift from research to practical on-the-ground implementation
- Use scientific process and prediction to anticipate outcomes and guide design

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INTEGRATED ECOSYSTEM DEVELOPMENT APPROACH

- **ECOLOGICAL NETWORKS**
- **ADAPTIAN TO CLIMATE CHANGE**
- **LAND USE CHANGES**
- **ECONOMIC DEVELOPMENT**

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16

ECOLOGICAL RESTORATION IN THE RHINE DELTA: SLUICES OPEN AGAIN



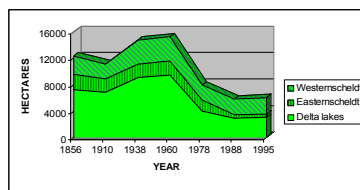
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ECOLOGICAL RESTORATION

IN THE RHINE DELTA: SLUICES OPEN?



Decline of
former tidal
areas



Atlantic sturgeon

Blocking of fish
migration routes



Bank erosion



Eutrophication and
algal bloom in
Krammer-Volkerak



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CLIMATE ADAPTION MEASURES



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19

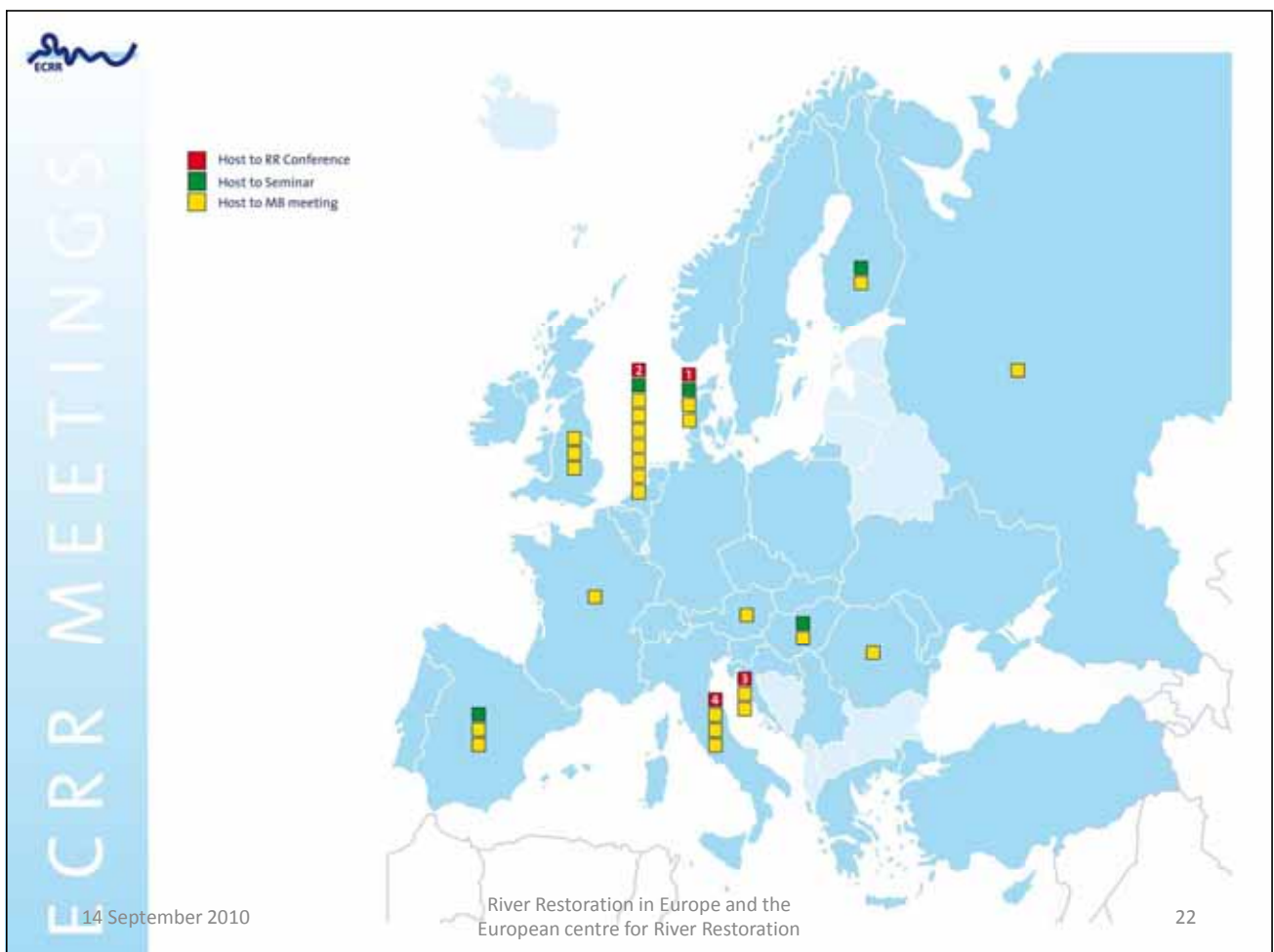
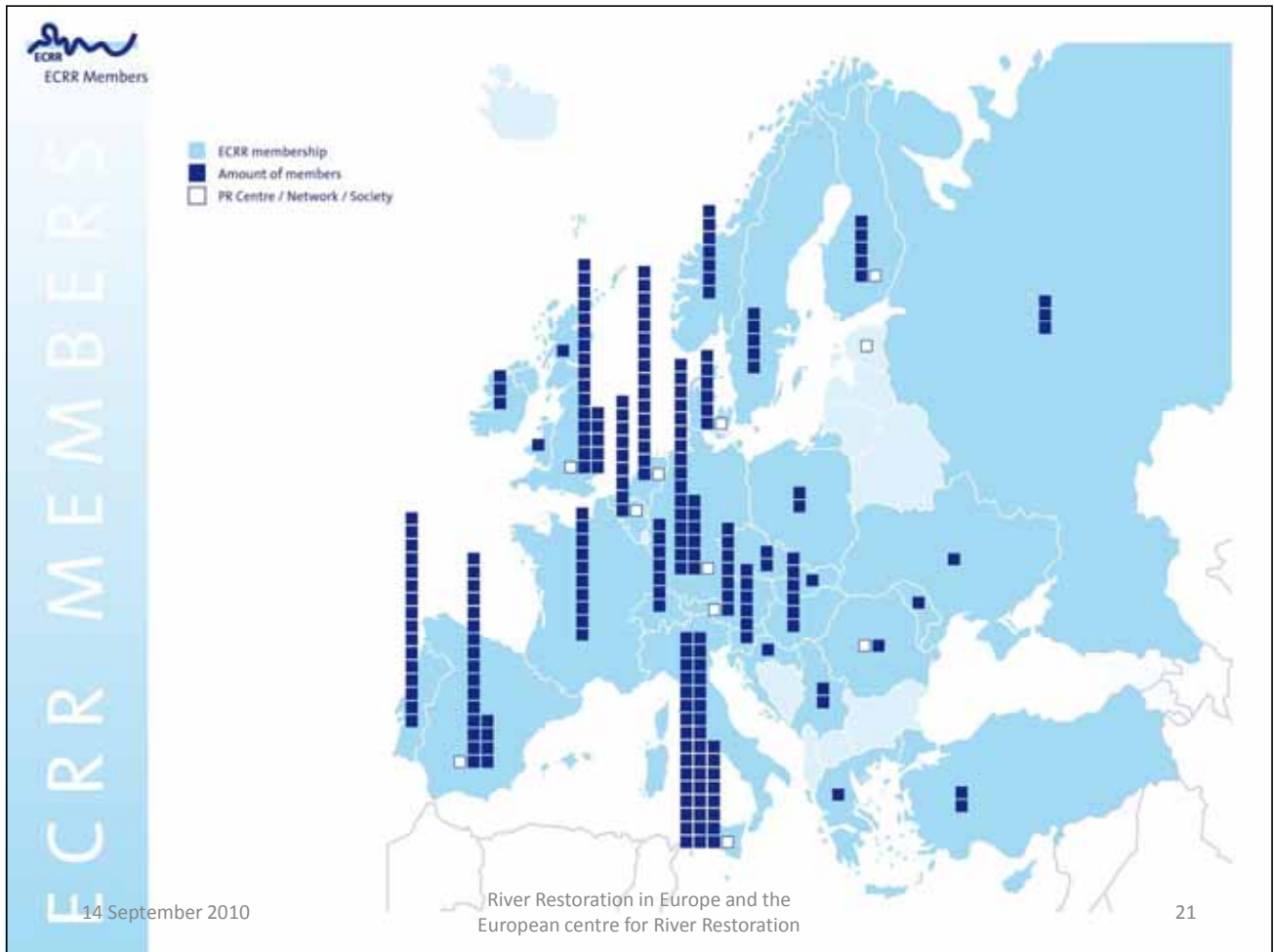
DEVELOPMENT ECRR

- 1999 – 2002: LIFE Project ECRR
- 1999 – 2002: Secretariat NERI/DK.
- 2002 – 2006: Secretariat RIZA/NL
- 2007 – present: secretariat CIRF/I; Centro Italiano per la Riqualfizone Fluviale
- 1999 – 2004: Chairman Torben; Moth Iverson NERI/DK
- 2004 – present: Chairman Bart Fokken;s Wetlands International Global NGO for sustaining wetlands.

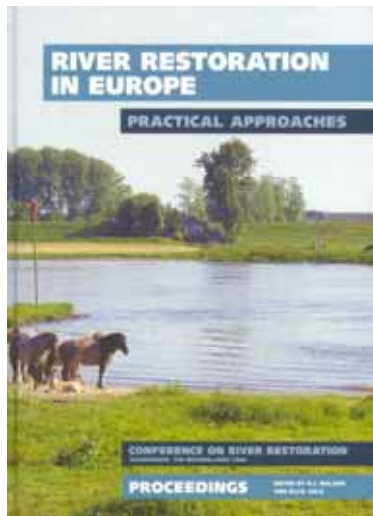
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20



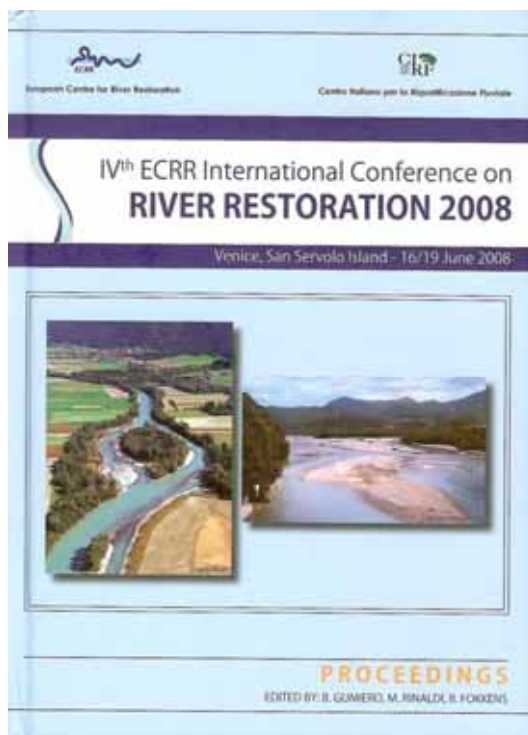
CONFERENCES



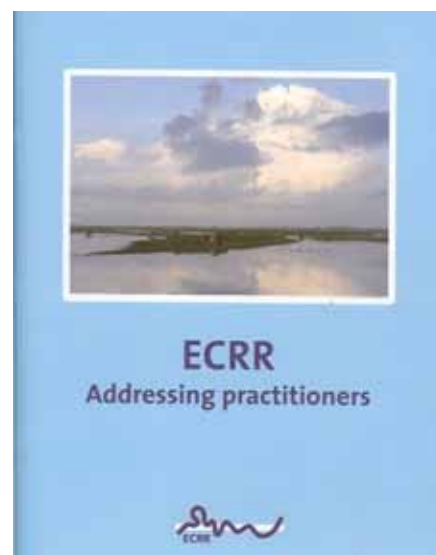
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23



WWW.ECRR.ORG

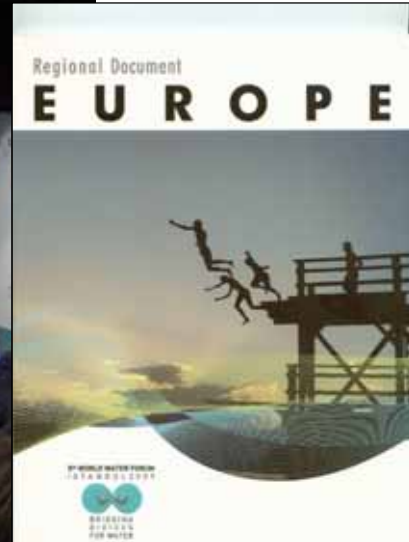


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WORLD WATER FORUM 5

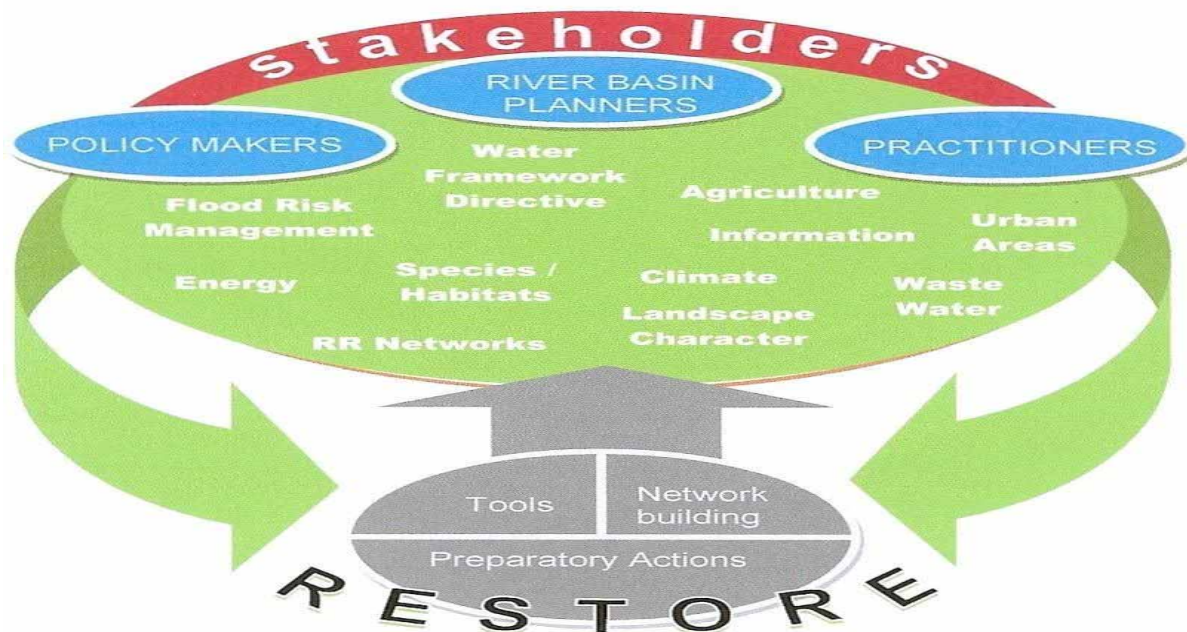


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25

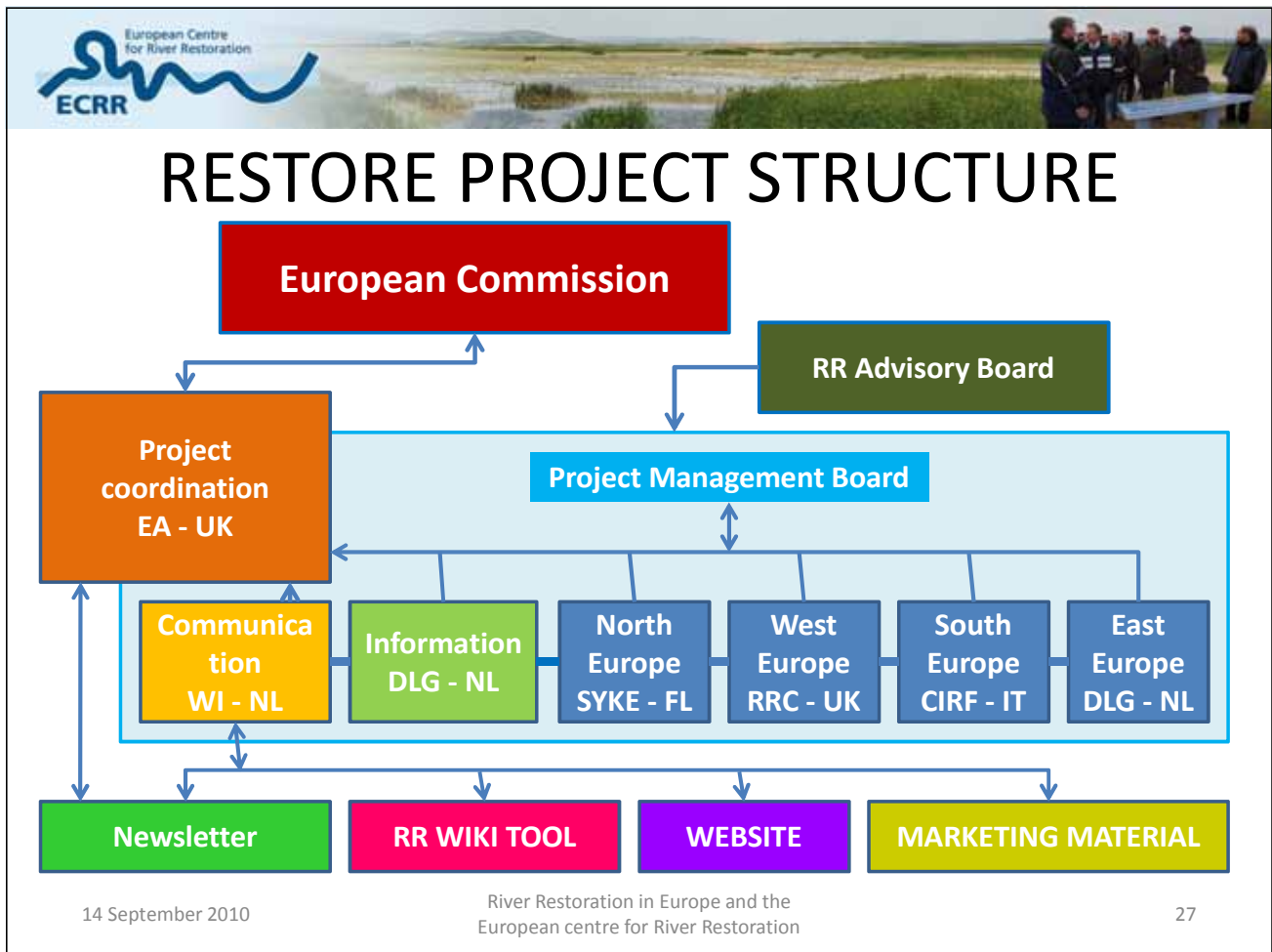
MAIN TARGET AUDIENCE



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ECRR FUTURE

- More members
- From more disciplines;
 - Research, monitoring and evaluation
 - Policy makers
 - Practitioners
 - River basin managers
- More National Centres
- More Partners: in Europe and Global
- Permanent secretariat

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CRITICAL SUCCESS FACTORS

- ECRR = Independent
- ECRR = a network organisation
- Open for all types of members
- Early recognition by pioneers
- EU (financial) support
- European legislation
- Stakeholder interest
- New policy drivers

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29



THANK YOU FOR YOUR ATTENTION!



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30