



ECO-SYSTEM BASED RIVER RESTORATION AND

GOOD ECOLOGICAL STATUS OF WATER BODIES

Bart Fokkens

Chairman European Centre for River Restoration



- ECRR is **connecting people and organizations** working on river restoration (network / platform)
- ECRR supports development of **good/best practices** of **ecological** river restoration

TARGET GROUP SOLUTION COORDINATOR



- ECRR
- EWA
- ONEMA

Specific Europe Region Priority Target (SERPT)

**Develop new knowledge and know how on
river hydro-morphology, river restoration
and protection of water eco-systems**



HUMAN IMPACT ON RIVERS AND DELTA'S

- **Loss of wetlands**
- **Loss of natural (hydro-morphologic) processes**
- **Habitat loss and fragmentation**
- **Loss of biodiversity**



WORLD WATER FORUM 2000

- **World Water Vision**
- **Main Challenges**
 - Securing food supply
 - *Protecting Ecosystems*
 - Sharing of water resources
 - Managing risks
 - Valuing Water
 - Good Water Governance



EUROPEAN WATER FRAMEWORK DIRECTIVE

- **IRBM plans**
- **Good Ecological Status Natural Water Bodies**
- **Good Ecological Potential Heavily Modifies Water Bodies**
- **Plans of Measures**



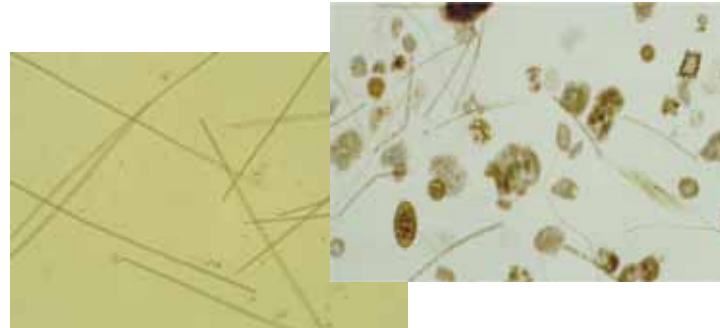
WATER POLLUTION PREVENTION





ELEMENTS

- Phytoplankton
- Other aquatic flora
- Benthic invertebrate fauna
- Fish





EU 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

RESTORATION MEASURES



MITIGATION MEASURES



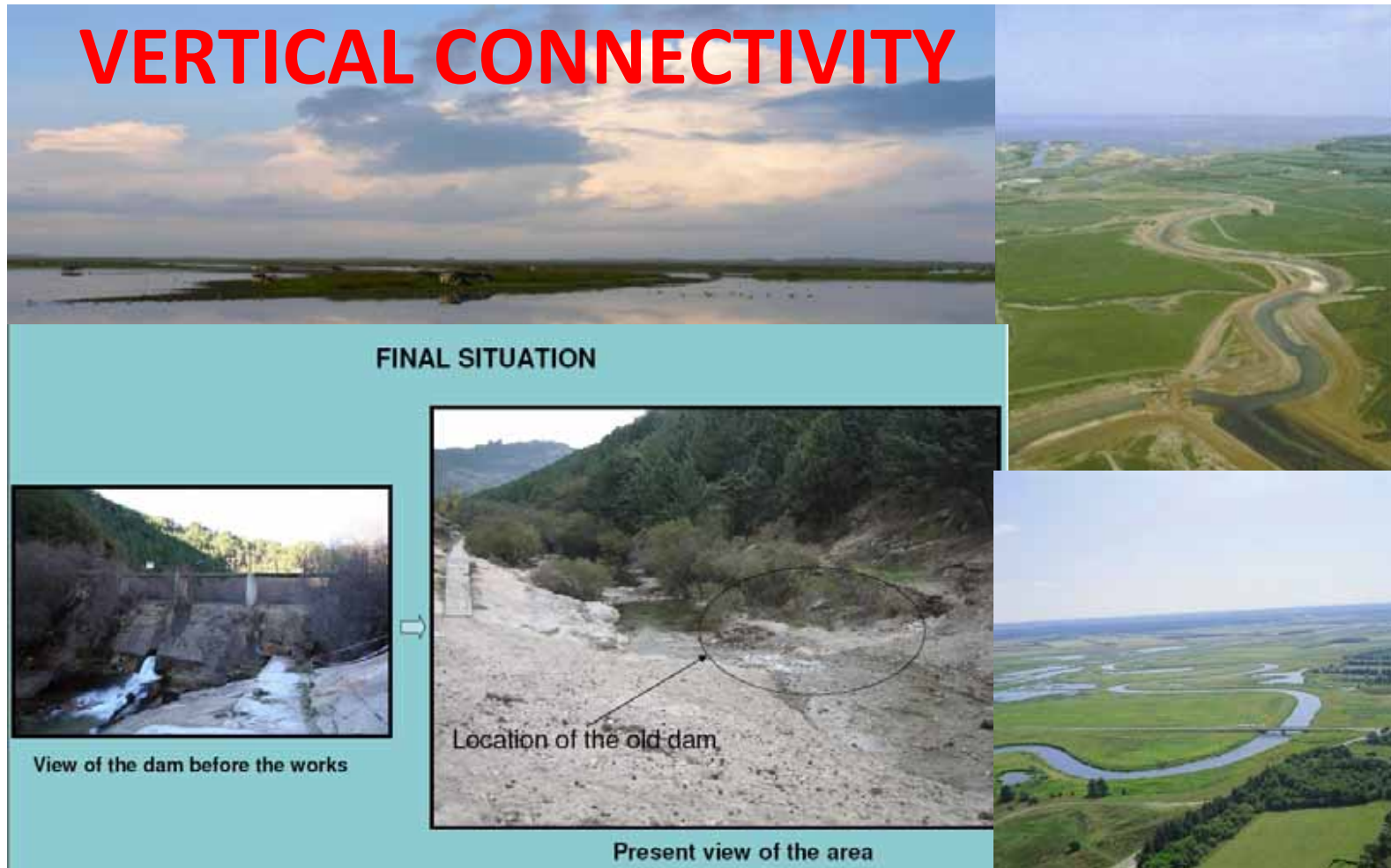


HYDRO – MORPHOLOGICAL PROCESSES





LONGITUDINAL, LATERAL AND VERTICAL CONNECTIVITY



HYDRO - MORPHOLOGY

PILOT PROJECT THUR RIVER SWITZERLAND



HYDRO DYNAMICS

PILOT PROJECT SKERNE RIVER ENGLAND



20-5-2011



Cooperative Actions for Water Security
Tashkent 20011

15



WETLAND RESTORATION

PILOT PROJECT PRUT RIVER ROMANIA



SIDE ARM RESTORATION

PILOT PROJECT DANUBE RIVER HUNGARY



- **Design river for the future with respect to the past**
- **River restoration is a long term strategic economic investment.**
- **Implement eco-system based RR**
- **Use IRBM plans**



CENTRAL ASIAN RR CHALLENGES

- **Adaptation to climate change**
- **Land use changes**
- **Improved water use efficiency**
- **Water for food and ecosystems**
- **Transboundary cooperation**

AWARENESS RAISING CAPACITY BUILDING



- **Communication and information**
- **Engagement of public society**
- **Involvement of local authorities**

- **Increase knowledge on RR**
- **Implement pilot projects**
- **Develop regional/local best practices**





THANK YOU !

WWW.ECRR.ORG