

WORKSHOP : 8-Networking river and watershed BRs

CHAIRPERSON: Guy Pustelnik (France)
Co-CHAIR: Eva Jelinkova (Czech Republic)
Facilitator/Leader : Jamie Linton (France)

Contact : r.michau@eptb-dordogne.fr

Number of participants: 36

Format of the workshop: background, brief presentations by several participants, debate on a project of common declaration on major problems linked to water and aquatic environments to share between the Reserves

INTRODUCTION

Dordogne BRs had the wish to launch a working group on water in MAB and EuroMAB. There is a working group on forest, mountain, but there is no working group on water. Nevertheless, the issue is so important in many discussions and for development of territories and human that it seems important to talk together and try to create a working group at Unesco.

According to Meriem Bouamrane, if we have a consensus on the need to work together on water issues, Unesco will support a water group. We'll have to demonstrate all together and explain why and how biosphere reserves should discuss the water issue. A water network should allow us to talk together about our problems, solutions and sticking points in order to solve them. We have a wide range to work in an efficient and very interesting way.

EXPECTED RESULTS

- Problems and solutions shared between watersheds in BRs.
- Design a common declaration on major problems linked to water and aquatic environments

PRESENTATIONS

- **Borut Peric and Darja Kranjc** (Slovenia), Karst (and Reka River Basin) biosphere Reserve
- **Carina Wettemark** (Sweden), Kristianstads Vattenrike Biosphere reserve
- **Charlotta Heimeirsson** (Sweden), Nedre Daläven river landscape
- **Dejan Panovski** (Republic of Macedonia), River Drin Basin - Ohrid-Prespa Transboundary Biosphere
- **Guy Pustelnik and Olivier Guerri (France)**, Dordogne basin Biosphere reserve
- **Miroslav Hátle and Eva Jelínková** (Czech Republic), Třeboň basin Biosphere reserve
- **Nabiha Ben M'Barek** (Tunisie), Ichkeul Biosphere reserve
- **Sanna Kipinä-Salokannel** (Finland), Archipelago Sea Area Biosphere Reserve
- **Siniša Golub** (Croatia), Mura-Drava-Danube - Transboundary Biosphere Reserve
- **Valery Neronov** (Russian federation), biosphere Reserves of the Volga River Basin

Biosphere Reserve	Country	Main issues and problems	Main solutions	Main deadlock points and difficulties
Karst (and Reka River Basin) biosphere Reserve	Slovenia	<p>Collecting and cleaning of waste water illegal releases, mostly from industrial plants and certain entrepreneurs Non-properly equipped and regulated parking lots Traffic Illegal waste dumps Industrial plants Disappearing of „water cultural heritage“</p>	<p>Strengthening the nature conservation surveillance Talks with companies that are in charge of Reka River and dumps monitoring on behalf of the industry firms etc. Chemical analysis of water Rescuing equipment in case of hazardous substances spillage Cleanup actions Public and local authorities awareness rising Funds search for the renaturalization of hazardous dumps Encourage the use of the UNESCO status by local authorities for gaining funds for the building of sewerage system Professional help availability, feedbacks and partnership for inhabitants and local authorities on concrete issues</p>	<p>Strong lobby Small political will for problem solving on the state level Ineffective inspectorates Lack of funds Inefficiency of individual municipalities with applications for international funds for the building of sewerage systems Local disagreements Uneducated inhabitants</p>
Kristianstads Vattenrike Biosphere reserve	Sweden	<p>Eutrophication due to leakage of nutrients (nitrogen and phosphorus) agriculture and forestry (sea, lakes, rivers). Brownification caused by leakage of TOC, Fe and humus (sea, lakes, rivers, drinking water). Fragmentation of stream habitats due to hydropower (recent and historical). Destroying ecosystemservices.</p>	<p>Dialogue and cooperation with landowners Re-/constructing wetlands Information and networking Inventory studies Cooperation with researchers Highlight the ecosystemservices in the biosphere reserve</p>	<p>Economical Financial Political</p>
Nedre Daläven river landscape	Sweden	<p>hydropower plants : the regulation of the water level has a great impact on the biological life in the waters and affects the whole river landscape</p>	<p>Restoration programs (rivers beds and salmonid population) Fishery management plan</p>	<p>Agreeing on what to do and how to do it Financing Regulation</p>

River Drin Basin - Ohrid-Prespa Transboundary Biosphere	Republic of Macedonia	Governance	Sustainable use of natural resources Conservation of Biodiversity enhanced Functions and Services of ecosystems stabilized and enhanced Awareness and education improved Research coordinated	
Dordogne basin Biosphere reserve	France	Threats to water quality and diffuse pollution. Loss of natural areas and weakening of biodiversity caused by land uses and activities affecting water resources (hydroelectricity, water treatment plants... Aggravation caused by excessive exploitation of water resources and climate change	Dialogue and consultation. Coordination and organisation. Programs and contracts. Operational works Research.	Political Financial Weaknesses of contractual approaches Complexity of Issues Institutional Limitations
Třeboň basin Biosphere reserve	Czech Republic	Conflicts between the intensive fish-farming and the nature conservation. Threats to water quality and diffuse pollution (eutrophication, cyanobacteria, ...) Extinction of sensitive plant species Large-scale extraction of peat	Conservation measures Financial instruments (in particular compensation) in addition to traditional administrative (legislative) instruments Revitalisation of abandoned river oxbows. Restoration of wetlands	
Ichkeul Biosphere reserve	Tunisie	hydropower plants and ecological imbalance	Water exchanges control scientific monitoring scientific research programs	
Archipelago Sea Area Biosphere Reserve	Finland	Eutrophication [Nutrient load from the catchment area (mainland and islands) and from elsewhere sea area "Inner load" from the anoxic sea bottom] Hazardous substances Marine litter (especially microplastics) Invasive species	Environmental education: In schools and kindergartens For tourists (at boat harbours, markets etc.) For locals (on events, markets, in blog etc.) Household wastewater treatment Fund for designing the system Consulting Encouraging to build shared systems with two or more households	Most of the nutrient load coming from the mainland and from the sea area outside the BR area. Eutrofication is a national and international problem, solutions require political decision making. Improvement in the water quality is slow. Targeting the measures has been deficient (not enough right measures in the right places). There are not enough technical solutions and effective measures yet. Challenges of the climate change.

<p>Mura-Drava-Danube - Transboundary Biosphere Reserve</p>	<p>Croatia</p>	<p>No tradition of institutional nature protection in region Mechanical” river management during 1945-1995 No sufficient funds and human resource for joint management The permanent idea of hydropower as sustainable option</p>	<p>Joint projects of institutions responsible for management of parts of TBR Branding needed : based on joint vision of what TBR should be (for local people, not just in theory) Branding needed > based on joint vision of what TBR should be (for local people, not just in theory)</p>	<p>Language and cultural barriers: Croatia and Hungary Low recognition of the TBR Variety of environment label and difficult to choose for communication with general public</p>
--	----------------	---	---	--

RESTITUTION/CONCLUSIONS

Pollution, climate change, land use, habitat loss, economic use, many problems are shared by participants of the workshop. Coordination, dialogue, collaboration, research, education, living laboratory, large scale strategy are the main solutions to foster. Engaging local people. Better connection between water management, authorities and biosphere reserves.

Bases of the network:

- sharing problems and solutions (positive experience),
- exchange information and scientific knowledge,
- make investment in research (respond to project proposals on shared themes or issues),
- engage joint actions and show BRs as demonstration and experimentation sites for sustainability,
- Work more with other UNESCO programs or initiatives like IHP, flood initiative, disaster risks reduction.

Conclusion

Exchanges between those participating led to design a common declaration (attached document). All participating are requested to complete and amend this document. EPIDOR, coordinator of Dordogne basin biosphere Reserve is going to create a website for the network.