Why a Global Network of Demonstration Sites in Ecohydrology? Arabic Countries Potential

Pascal Breil, Giuseppe Arduino, Ranya Amer, Sami Zaki-Mohamed, Ola Abdelwahab, Olfa Ben Saïd

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What is Ecohydrology?

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IHP-VIII: Water Security

Responses to Local, Regional, and Global Challenges

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What is Ecohydrology?

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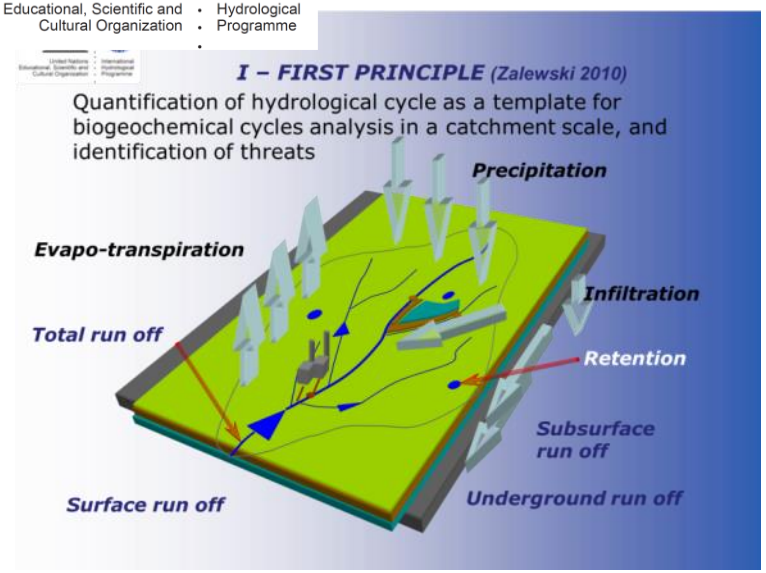

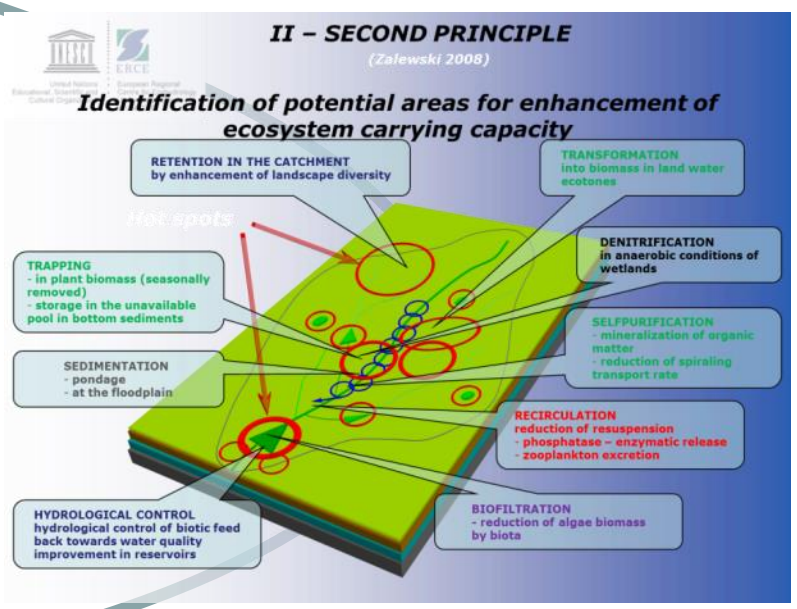

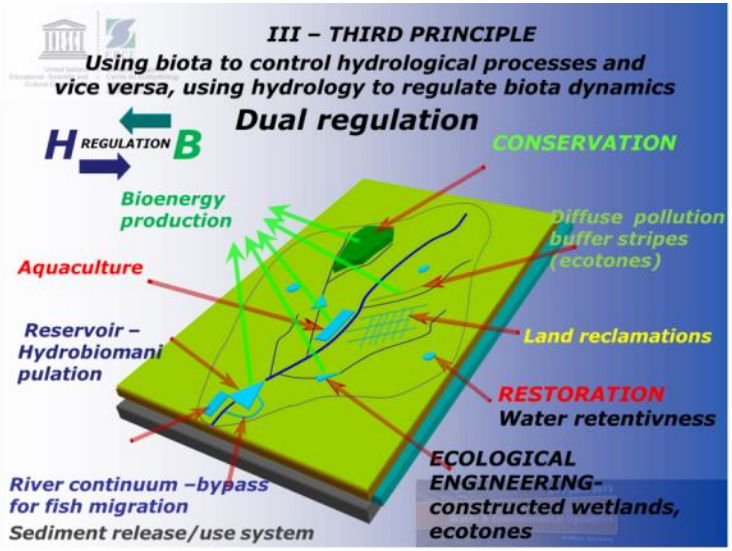

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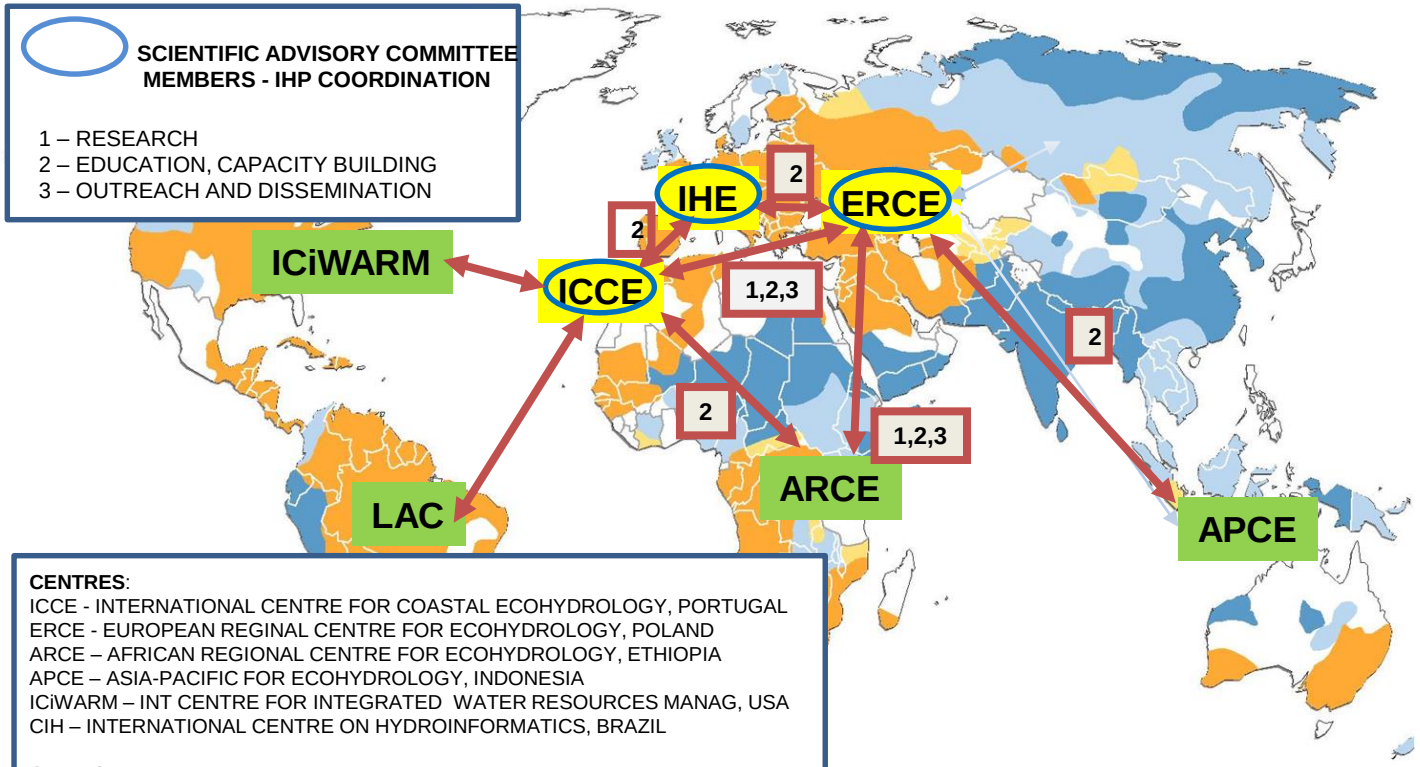
UNESCO ECOHYDROLOGY "FAMILY"



CENTRES:
ICCE - INTERNATIONAL CENTRE FOR COASTAL ECOHYDROLOGY, PORTUGAL
ERCE - EUROPEAN REGINAL CENTRE FOR ECOHYDROLOGY, POLAND
ARCE – AFRICAN REGIONAL CENTRE FOR ECOHYDROLOGY, ETHIOPIA
APCE – ASIA-PACIFIC FOR ECOHYDROLOGY, INDONESIA
ICiWARM – INT CENTRE FOR INTEGRATED WATER RESOURCES MANAG, USA
CIH – INTERNATIONAL CENTRE ON HYDROINFORMATICS, BRAZIL

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ECOHYDROLOGY AND HYDROINFORMATICS – CAPITAL NORMAL UNIV. BEIJING
ECOHYDROLOGY – IHE, DELFT
ECOHYDROLOGY: WATER FOR ECOSYSTEMS AND SOCIETIES, UNIV ALGARVE, FARO, PORTUGAL

FOCAL POINTS FOR ECOHYDROLOGY
LAC – LATIN AMERICA AND CARIBBEAN

L. Chicharo, 2016
G. Arduino, 2018

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What are the « demosites » ?

The Ecohydrology Programme is also based on a network of demonstration sites which integrate the concept of "**enhanced ecosystem potential**" with EH strategies closely related with water to improve IWRM on specific areas.

They:

- Are **long-term monitoring** projects involving different local stakeholders in order to solve environmental, economic and social issues.

- Use the **most appropriate** and **cost-effective** ecohydrological engineering solutions for each ecosystem as management tools for Integrated Water Resources Management (IWRM).

- Provide contribution for both **human** Sustainable Development Goals and **environmental** ones .

These projects follow a solution-oriented approach for the enhancement of **W**ater resources, **B**iodiversity and ecosystem **S**ervices for society and of the **R**esilience to various forms of anthropogenic impacts (**WBSR**).

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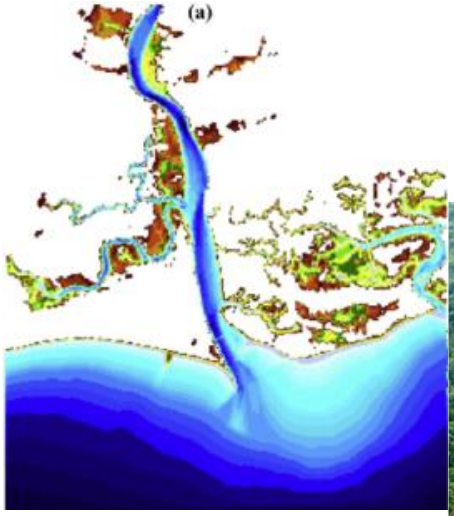
What are the « demosites » ?



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http://ecohydrology-ihp.org/demosites/

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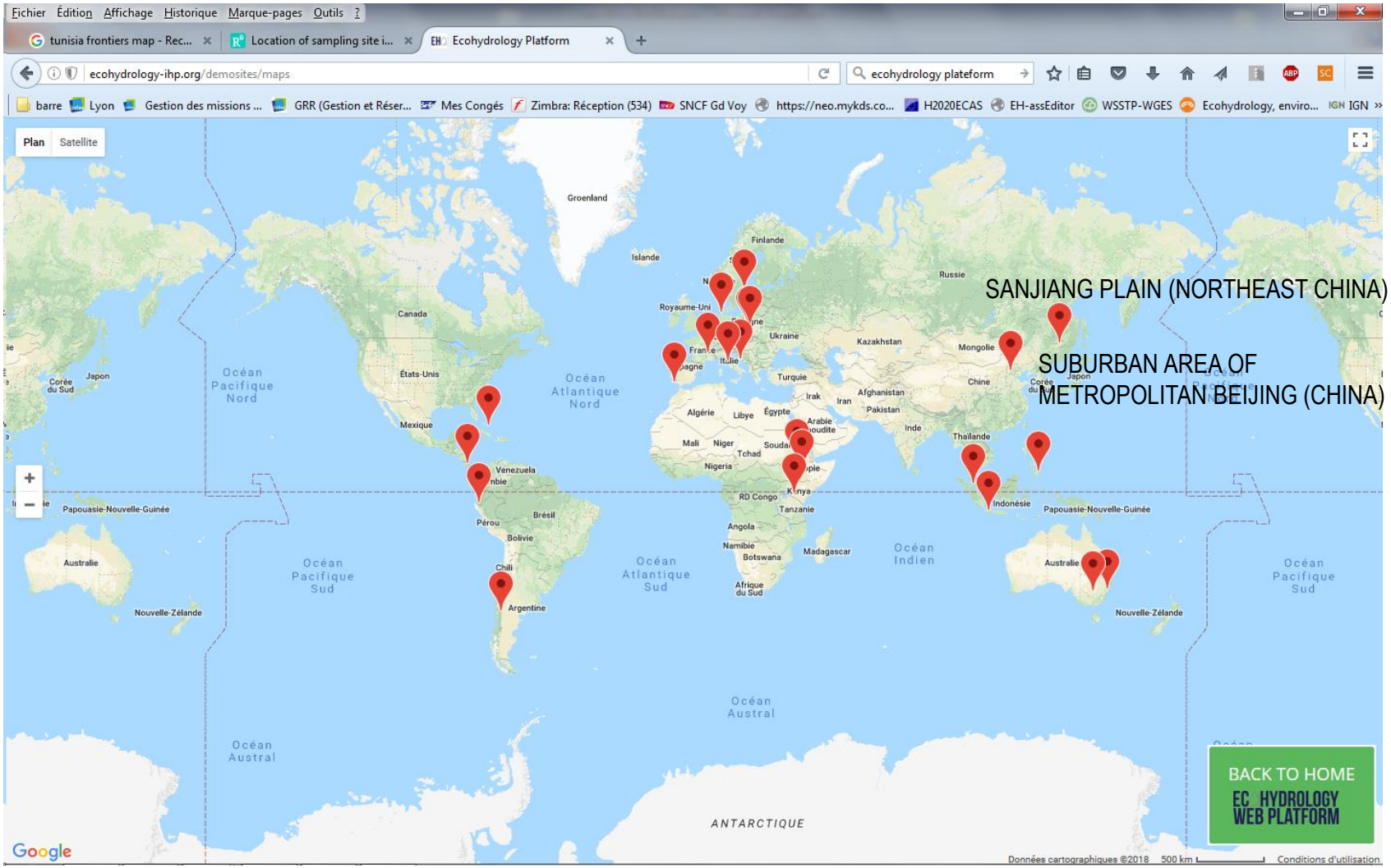

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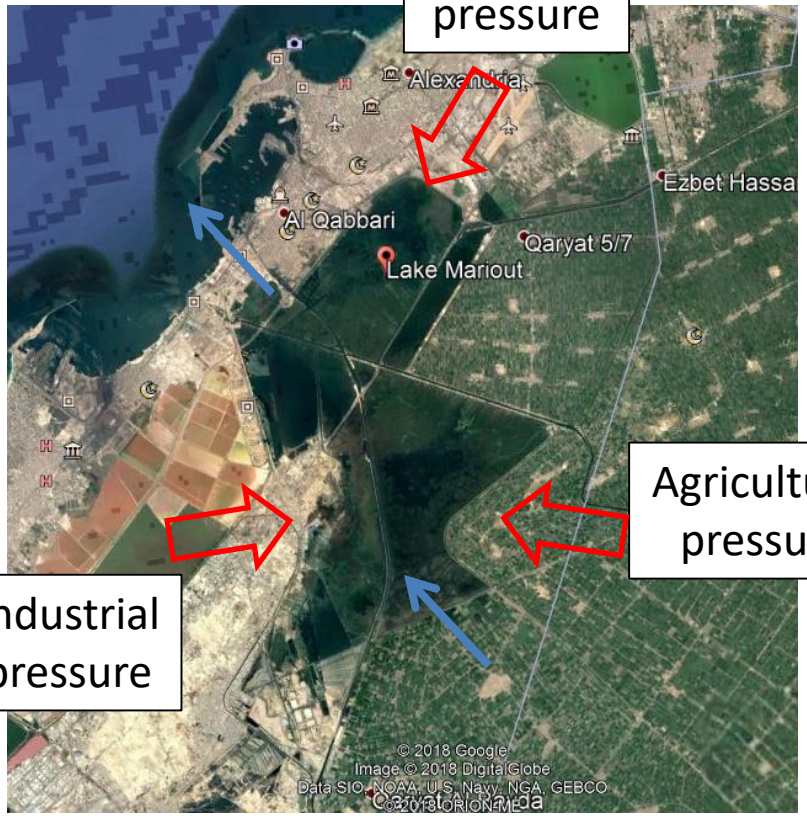
Mariout Lake (Egypt)



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EcoHydrological solutions?

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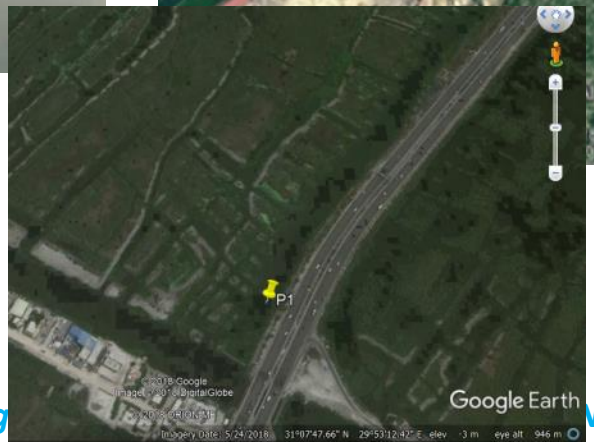

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Bizerte laguna (Tunisia)

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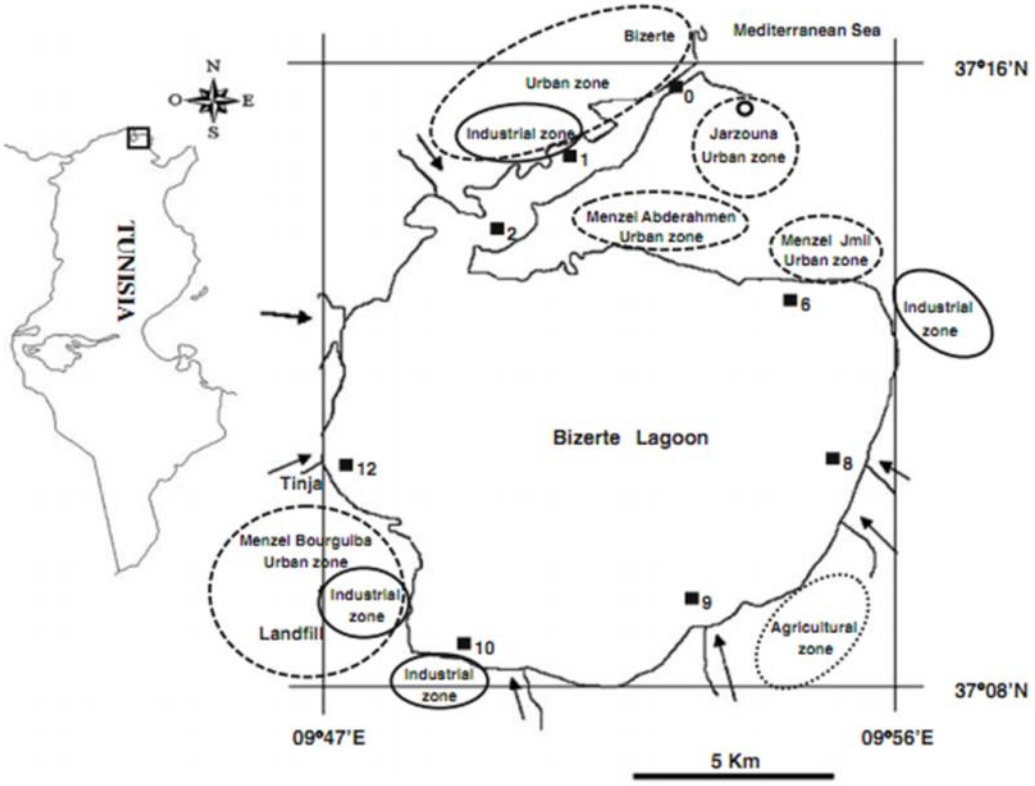
The Laguna of Bizerte is a nearly circular body of brackish water about 12 km in radius and up to 13m deep, open to the sea through the narrow Bizerte canal. It is surrounded by farmland and two medium-sized metropolitan areas (Bizerte with a population of 140,000, and Menzel-Bourguiba with a population of 55,000). Major industrial plants with a strong water demand on the shores are present. The Laguna itself is exploited for fishing and shell farming.



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EcoHydrological solutions?

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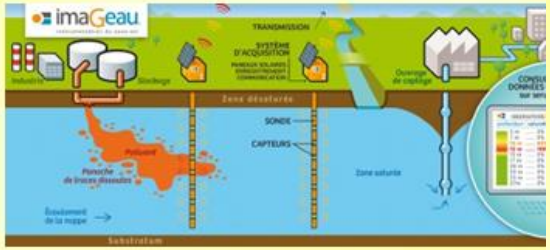
The Laguna system has important subsistence and small scale commercial fisheries and hosts shellfish aquaculture. Aquifers provide water to the communities and are exploited by agricultural activities in the basin but also are at a receiving end of local pollutions. A variety of municipal, agriculture and industrial activities pollute the system.

The result is a system where the potential flows of ecological services are diminished by the environmental degradation, implying a strong case for remediation and prevention of additional pollution.

Bioremediation and biorehabilitation of indus
contaminated sites on the shores of the Bizer



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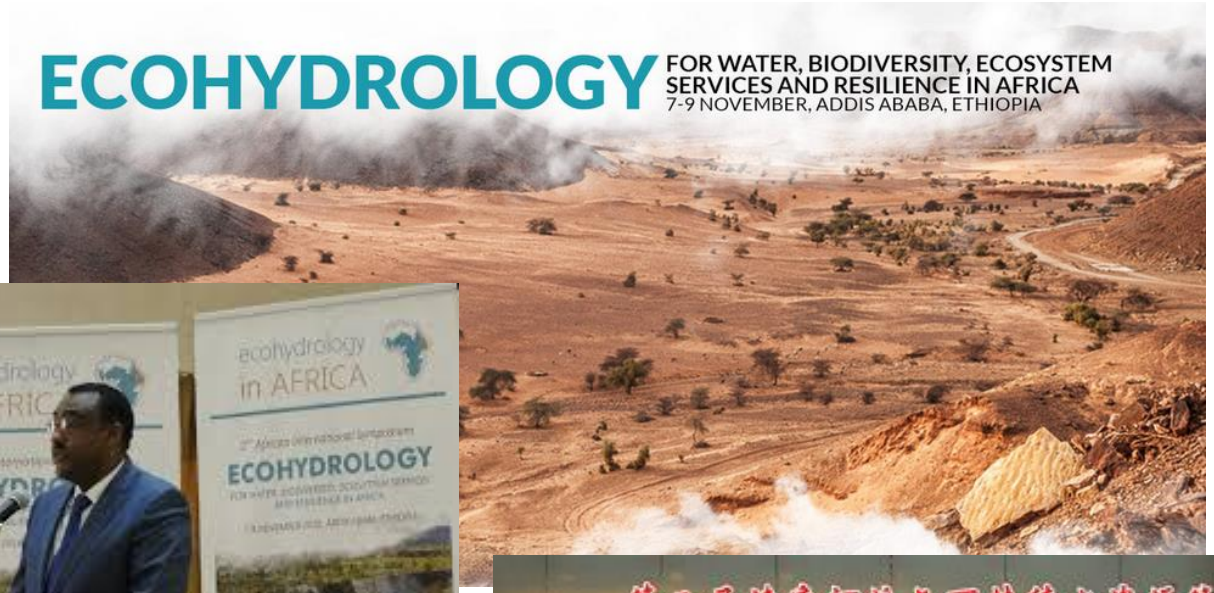

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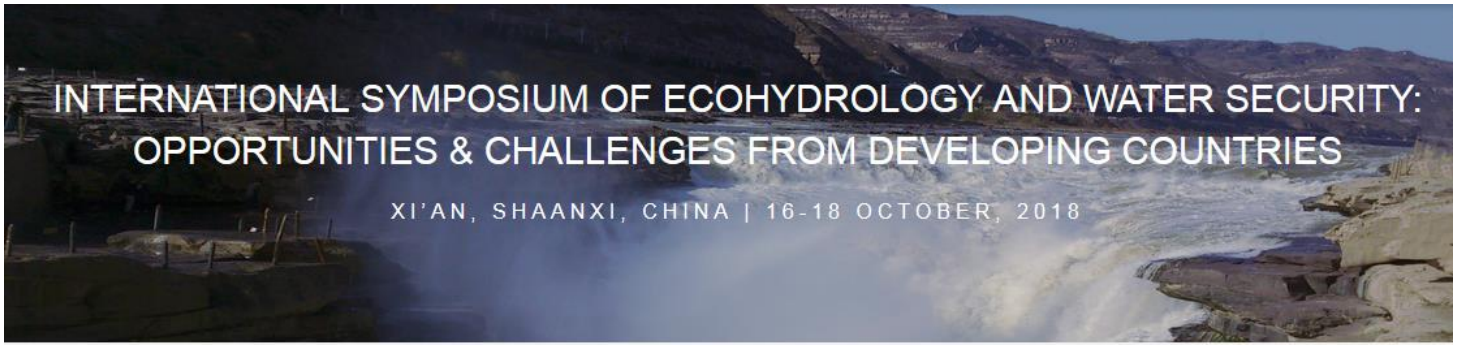
To learn more on EH….

http://8thfriendwater.iwhr.org/40?lang=en

http://isews.nwu.edu.cn/



Coming 2020 EcoHydroEco conference in Faro (Portugal)