

2024 Conference on Land Use Change and Water Systems

Interdisciplinary approaches connecting Social and Natural Sciences

Montpellier, Maison des Sciences de l'Homme Sud, 19 June 2024

Over the last decades, land use and land management change - urbanization, development of intensive agriculture, land abandonment, reclaiming of wetlands and floodplains... - have exerted significant influences on water systems and the broader environment and society. Recently, practitioners and academics are actively exploring innovative land use strategies, with a stronger reliance on natural processes. Their goal is to foster a more integrated management of water capable of addressing on-going global changes.

Supporting decision makers in the design of these strategies requires the use of interdisciplinary approaches, encompassing *inter alia* : i) the understanding of relationships between land use dynamics and water systems (surface and groundwater), ii) the description of social representations and perceptions surrounding these changes and iii) the assessment of economic, social and environmental impacts stemming from historical changes and prospective scenarios.

This scientific conference endeavours to showcase interdisciplinary contributions that integrate natural and social sciences and cover these different approaches. The objective is to provide valuable insights supporting the development of sustainable land management strategies.

The conference will cover three main themes:

Theme 1 : Characterization of land use, water use and water resources through remote sensing, observation and citizen science

Theme 2 : Representation and modelling of the complex interactions between land, water and social systems

Theme 3: Interdisciplinary assessment of economic, social and environmental impacts stemming from land use change and related policies

This conference is organized by BRGM in the framework of the **ABRESO project** (<https://abreso.psu.edu/>) of the Belmont Forum and co-organized by the Groundwater team of the G-eau lab of Montpellier



Conference information

The conference will take place at Montpellier, France on **19 June 2024** from 8.30 am to 5 pm. Participation is free but subject to registration and availability of space.

[Register here](#)
[before 31 May 2024](#)

Contact : e.lenoir@brgm.fr

Venue

Maison des Sciences de l'Homme- MSH Sud
71 rue du Professeur Henri Serre
Montpellier

<https://maps.app.goo.gl/9vbjNEW84mi66tZi8>

The conference will take place in the Auditorium room - STC2-001. Access will be indicated on site.

Transportation

- From the Airport: Bus shuttle until Place de l'Europe and Tramway line 1 – direction Mosson – Stop: Place Albert 1^{er} Saint Charles
- From the train station : Tramway line 1 – direction Mosson – Stop: Place Albert 1^{er} Saint Charles
- By car : possible parking at Parking Indigo Peyrou Pitot (7 Rue du Carré du Roi – Montpellier)

Meals

Coffee breaks and lunch will be offered during the conference.

Tentative programme

8.30 – 8.45	Registration	
8.45 – 9.00	Opening remark	Timothy White (Penn State University, USA) and Philippe Le Coent (BRGM, France)
	Theme 1 : Characterization of land use, water use and water resources through remote sensing, observation and citizen science	
9.00 – 10.30	Exploring socio-ecological change at multiple temporal scales in the Bas-Ogouée Ramsar Site, Gabon.	Christophe Demichelis (IRD et Université de Mayotte, France)
	"Socio-piezometric" campaigns: interdisciplinary groundwater measurements in the Upper Mekong Delta, Cambodia	Romain Valadaud (IRD, France)
	Trends in Land and Water Usage from 2000 to 2023: Observations from the Tensift Basin, Morocco	Ikram El Hazdour (Cadi Ayyad University, Algeria)
10.30 – 10.45	Coffee Break	
10.45 – 11.15	LTSER Feitsui : Applying Socioecological Approach to setup Long-term Research Platform for Sustainability	Jr-Chuan (River) Huang (National Taiwan University, Taiwan)
	Theme 2 : Representation and modelling of the complex interactions between land, water and social systems	
11.15 – 12.15	Path flow of water, use of circular economy principle on water resources and biodiversity management in a port area using eDPSIR and causal network	Jeremy Solere (Port de Marseille, France)
	Spatial and temporal interactions of land-use changes and water resources management in the Vietnamese Mekong Delta	Thuy Ngan Le (Wageningen University, The Netherlands)
12.15 – 13.15	Lunch Break	

Theme 3: Interdisciplinary assessment of economic, social and environmental impacts stemming from land use change and related policies

13.15 – 15.15	Groundwater nature-based solutions to enhance watershed resilience to global changes	Cécile Hérivaux (BRGM, France)
	Urbanization and Wetland Biodiversity: Assessing land use changes and human perceptions	Abdallah Aouadi (Université Chadli Bendjedid d'El Tarf, Algeria)
	Land use and management policies to protect water quality in Southeastern New Hampshire, USA.	Janet Swim (Penn State University, USA), Adam Wymore (New Hampshire University, USA)
	Should abandoned land be redeveloped? Contributions from an interdisciplinary approach between hydrogeology and economics.	Philippe Le Coent (Brgm, France)
15.15 – 15.30	Coffee Break	
15.30 – 16.30	Pasture-forest transition in the Italian Alps: An interdisciplinary approach to uncover social and natural implications	Andrea Scartazza, CNR-IRET (Italy)
	Forest and water resources management under changing social and environmental conditions in Japan	Gomi Takashi (University of Nagoya, Japan)
16.30-17.00	Lessons learned and way forward	

Please visit the webpage of the conference, <https://abreso.psu.edu/2024-conference-on-land-use-change-and-water-systems/>