



SESSION DESCRIPTION

ID: B2a

Intermittent rivers and ephemeral streams – Yes, they do provide valuable ecosystem services

Hosts:

	Title	Name	Organisation
Host:	Mr.	Dídac Jorda–Capdevila	Catalan Institute for Water Research
Co–host(s):		Irene Iniesta–Arandia, Luis Loures, Maria Ilhéu, Stella Tsani, Phoebe Koundouri, Vicenç Acuña, Rui Alexandre Castanho, Xavier Garcia, Yong Jiang	

Abstract:

Intermittent rivers and ephemeral streams (IRES) are very dynamic ecosystems differing from permanent rivers mainly due to flow absence during a period of the year–cycle. Some streams and rivers dry out during the summer period; others are permanently dry except after a heavy storm; even some rivers’ flow stops when they freeze. The natural disturbance imposed by the intermittency of the flow regime configures a specific biota and biogeochemical processes, but also leads to a poor social perception, making IRES more vulnerable to human–induced pressures. These ecosystems are actually one of the most sensitive to global change, despite their pervasiveness throughout the world. Nevertheless, IRES significantly contribute to human well–being and provide multiple ecosystem services to society: from the provisioning of food and water for cattle when these resources are scarce, to the cultural use of dry channels as pathways. Still, there are few research studies conducted in IRES ecosystems services and empirical evidence is missing.

“Intermittent rivers and ephemeral streams – Yes, they do provide valuable ecosystem services” is a special session organised by some members of the Science and Management of Intermittent Rivers and Ephemeral (SMIRES) Project and specifically of its Working Group 2 on “Flow alterations, ecosystem services and management of IRES”. Our main objective for this session is to advance the knowledge of IRES and the ecosystem services they provide by



adapting current techniques of quantification and valuation and providing illustrative case studies.

Goals and objectives of the session:

Our main goal is to explore the importance of intermittent rivers and ephemeral streams from multiple geographical areas in terms of ecosystem services provision.

Specific objectives are to:

- Identify effective indicators to assess ecosystem services provision in IRES.
- Introduce hydrological intermittence in quantification and valuation techniques of ecosystem services provision.
- Provide case studies that account for ecosystem services provision by IRES and their socio-economic values.

Planned output / Deliverables:

The presentations are expected to be publishable. Depending on the quantity and quality of those, the organisers will study the possibility of proposing a special issue on the same topic as the session.

Voluntary contributions accepted:

Yes, I allow voluntary contributions to be submitted to my session for review

Related to ESP Working Group/National Network:

[Biome Working Groups: BWG 2A – Freshwater wetlands](#)