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11. Comparative analysis of ephemeral river ecosystem services in agricultural and natural landscapes in mediterranean environments. A practical approach to Caia River (Portugal) (RUI ALEXANDRE CASTANHO, JOSÉ MARTÍN GALLARDO, LUÍS LOURES, TATIANA KALETOVÁ, JOSÉ CABEZAS, LUIS FERNÁNDEZ POZO, JOSÉ MANUEL NARANJO GÓMEZ, SERGIO LOUSADA, PATRICIA ESCORCÍO y CARLOS PINTO-GOMES)

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### **11 Comparative analysis of ephemeral river ecosystem services in agricultural and natural landscapes in mediterranean environments. A practical approach to Caia River (Portugal)**

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**Abstract**

Mediterranean landscapes present a large amount of biodiversity and ecosystems leading to their unique identity. In fact, it is increasingly acknowledged that these ecosystems provide a large range of benefits, not only for the area where they are located but also for their surroundings. Benefits that may vary from aesthetical values to socioeconomic aspects that might influence territorial development, including also the preservation of those ecosystems.

The ephemeral and intermittent rivers provide several and pivotal ecosystem services within to the environment. However, these services differ a lot from agricultural to natural landscapes – e.g. agricultural landscapes structure is susceptible to dramatic changes through the seasons and water cycles.

Thus, a comparison study between agricultural and natural Mediterranean environments landscapes have been carried out – allowing to deeply understand ephemeral rivers ecosystems systems and their dynamics. Considering the purpose of the study - a comparison analysis between river ecosystem services in agricultural and natural landscapes in Mediterranean environments have been conducted. Therefore, a Cross-Border ephemeral river – Caia River (Portugal-Spain) have been selected as a case study. The comparison has covered cultural, aesthetic, functional and socio-economic ecosystem services; showing the relevance of the functions granted by the river.

**Keywords:**

Agricultural and Natural Landscapes; Caia River; Ecosystem Services (ES); Ephemeral Rivers and Streams; Iberian Territories.