

CLIMATE RISK OF SHALLOW TOURISTIC LAKES: A CASE STUDY OF LAKE VELENCE, HUNGARY

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Abstract. The European shallow lakes used primarily for tourism are subjected to a large amount of environmental pressure, and climate change is adding new problems and aspects to them: a complex analysis of processes and connections is necessary to make appropriate decisions and strategies. In our research, using literature review and precedent analysis, the climate risk of a Central European lake was reviewed, as well as the natural conditions and landscape change processes that determine its sensitivity. It was analysed the ecological and economic effects of the record low water levels of 2021-22, focusing on processes. It was determined which of the current land uses can be considered risky or sensitive in terms of climate change. It was found that natural processes are uniformly leading towards pre-regulation character, low water levels facilitating the regeneration of flora and fauna. However, the dominant land use is dependent on artificially elevated water levels, and therefore serious economic problems have arisen. Beaches, bathing, and angling tourism are the most vulnerable to climate change.

Keywords: *climate change, climate risk, Lake Velence, tourism development, shallow lakes.*