

Assessment of Water Quality Vulnerability to Extreme Drought in the Nakdong River Basin

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Abstract

As the frequency of drought due to climate change is increasing and the severity of drought becomes severe, it is urgent to prepare measures against extreme drought. Despite the significant impacts of drought on the coupled human–environment system, we have not fully understood the consequences of extreme droughts affecting all parts of the environment and our communities, and there is no system to assess environmental droughts quantitatively. Even if a drought disaster occurs on the same scale, the severity of the drought depends on the vulnerability of the region. Therefore, this study proposes environmental drought assessment based on water quality vulnerability to extreme drought for the resilient proactive response.

Key words: Extreme drought, Water quality, Vulnerability, Resilience, Nakdong River

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