

## Parameterizing the diffuse pollution in a continental Mediterranean city

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### ABSTRACT

Urban surface runoff drags diffuse pollution from entire watersheds in most of the cities with a Mediterranean climate (high rainfall peaks plus lack of rainwater). Pollutants coming from air pollution, road traffic, waste materials, street cleaning, and the contaminants already in place in the sewer network are the main sources. Given a specific rainfall event, understanding, measuring, and predicting pollution is of vital importance when it comes to managing combined sewer overflows into the environment. An exhaustive study of urban runoff pollution for a combined sewer system (CSS) was carried out to promote integrated management of Madrid watershed based on quantity and quality of wastewater that flows along with the CSS and is discharged into the river. Results show that urban runoff pollution peaks are higher than wastewater pollution peaks.

**Keywords:** Combined sewer overflows; Diffuse pollution; Ecological status; Integrated system; Real-time model

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