



Improving Operation of Sewerage Facilities on Basis of Real-Time Stormwater Information

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ABSTRACT

The Japan Institute of Wastewater Engineering Technology and METAWATER Co., Ltd. have jointly developed Real Time Urban Drainage Management Systems to realize efficient urban stormwater drainage management. In this study, the subject system was introduced into a stormwater drainage area that has suffered large-scale flood disasters in the past. We verified the benefits gained by introducing the system: improved flood control, CSO control, and reduced electricity costs from energy conservation.

The results indicated that substantial cost effectiveness was achieved by introducing the system into the case study area. This was calculated as B (benefits)/ C (cost) = 2.8. In this paper, we describe two cases in which introducing the system proved to be highly beneficial. In Case 1, operation of the stormwater drainage pump for the stormwater storage pipe was improved. In Case 2, the operation of the intercepting pump was improved at a high-water level.

KEYWORDS

forecast, radar, rainfall, real-time, simulation