

## Operation of Jungrang Experimental Watershed

SHIN WOO PARK<sup>1</sup>, DEG HYO BAE<sup>1</sup>, JONG TAE LEE<sup>2</sup>, HYUNG SUB KIM<sup>3</sup>, IE HYUN KIM<sup>4</sup>

 $^1$  Sejong University  $^2$  Kyunggi University  $^3$  Korea Iinstitute Of Construction Technology  $^4$  Kyung Bok University

The objective of this study is to share the basic ideas for the management of 299.60-km2 Jungrang experimental watershed, operated by Urban Flood Disaster Management Research Center(UFDMRC), for urban flood monitoring in and near the Seoul metropolitan area. The catchment length of the Jungrang basin is 34.8km with outlet at Yongdap, Seoul and most of the terrains consist of complex areas with forested mountain and agricultural areas on the upper basin and residential/commercial areas on the lower basin. The experimental watershed contains 22 automated raingauge stations, 7 stage stations and 13 pumping stations. It also has three specific field-scale Experimental sites(Wulgye 1, Gunja, Children Grand Park subbasins) depending on different land uses. The topographic and hydrologic features of the basin such as basin subdivisions, curve number values, probabilistic rainfalls and design discharges are provided in this study. In addition to providing GIS-based land use, soil type, sewer drainage network data, the collected hydrologic and meteorologic data on this experimental watershed are analyzed.