

Supplementary data to:

Capacity assessment of urban green space for mitigating combined sewer overflows in the Tokyo metropolitan area

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Table S1. The data used in this study and their sources.

Data		Data source
Topographic data		Elevation Navigator for all of Japan https://www.hyoukou-ichiran.com/
Land use/cover data		Earth Observation Research Center (EORC) https://www.eorc.jaxa.jp/ALOS/jp/index_j.htm
Hydrological groups	soil	National Land Information Database https://nlftp.mlit.go.jp/ksj/index.html
Road network data		Open Street Map Database https://www.openstreetmap.org/#map=5/35.588/134.380
Rainfall characteristics		Japan Meteorological Agency https://www.jma.go.jp/jma/index.html

Table S2. Curve number (CN) for each land use type according to the USDA classification (2007) [1]. The hydrologic soil group was determined based on the surface soil group in the Tokyo metropolitan areas shown in **Figure 1(b)**. The hydrologic soil group was set as group A, and the curve number value was determined according to the SCS-CN (USDA-SCS, 1986) [2].

Land use type	CN value (hydrologic soil group: A)
Commercial and business	89
Industrial	81
Residential	77
Other urban area	77
Rice paddy	39
Crops	60
Grassland	49
Deciduous broad-leaf forest	30
Deciduous needle-leaf forest	30
Evergreen broad-leaf forest	30
Evergreen needle-leaf forest	30
Bare land	77
Bamboo	30
Solar panel	98

References

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53. USDA-SCS, 1986. Urban Hydrology for Small Watersheds. Technical Release No. 55 (TR-55). USDASCS, Washington DC. Available online: <https://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=22162.wba> (accessed on 19 December 2022).