# The survey research about Using Runoff analysis model

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(Purpose)

It was published in 1999 aiming at "Utilizing Runoff analysis models Manual" being utilized by planning, verification, etc. of the effective and efficient measure against flood measures / CSO projects, and the water quality analysis examples, the river and sewer integrated analysis examples, etc. were added in June, 2003, and the possibility of a scope expansion was shown and revised. This research investigated widely flood measures, actual condition of CSO projects in cities have combined sewer, the request for this manual etc. and accumulated and arranged examples of Runoff analysis model application situation, and after analyzing results of an investigation, it aimed at defining the revised object of manual.

(Investigation outline)

The questionnaire about the following three viewpoints was performed for the sewer administrator of 713 national cities on November 1, 2004 at that time (*Tokyo ward is added up as 1 in all city).

① Basic information: plan scale, plan many factors, rate of maintenance, flood condition and present measure, current status of applying manual, etc.

② The degree investigation of satisfaction (included comments and requests) to "Utilizing Runoff analysis models Manual"

③ Operating actual result which utilized runoff analysis model: examination annual, examination drainage division scale, the contents of examination, modeling outline, etc.

(Result)

Although the questionnaire collect rate was 42% (303 cities / 713 city), many concrete requests and opinions on a manual were sent, and the size of expectation for this manual should hear about it. A results-of-an-investigation outline and a manual revised object are shown below.

1． Results-of-an-investigation outline

・The rate of rain water maintenance is generally low, flood damage has generated it in 80 percent of reply city.

・40 percent of city which flood has generated has never used runoff analysis model and "Utilizing Runoff analysis models Manual".

・The degree of satisfaction of fundamental portions, such as an outline of a model and required investigation, is good (6 -70 percent is satisfactory).

・The degree of satisfaction about modeling and a calibration is a little low (the degree of satisfaction is 50 or less percent).

・Desires more concrete description for modeling such as the concrete view with modeling and the modeling method infiltration institution etc.

・The request about presentation of a judgment element and a judgment standard etc. desires for a autonomous community to be able to check in the high portion of speciality nature.

・Desires fullness of analysis examples, such as evaluation of infiltration institution, the integrated analysis with river, and surface flood analysis.

・Desires printing of the area compensation in estimation.

2． A manual revised object

Based on results of an investigation, the following matters are enriched, and considered as the object made into the contents utilizable for a wide rage city and wide range analysis.

・Fullness of the contents which are easy to utilize also in a minor city, and an addition of concrete description.
・Indicate the modeling method of concrete description and new analysis, such as infiltration institution evaluation, rather than it can set to modeling.
・Fullness of the concrete description in various judgment aspects of affairs, such as the degree judgment of adjustment of a calibration.
・An addition of a new analysis example, such as an example, the flood analysis, etc. which were selected carefully.
・Reexamination of estimation data.

(Study schedule)

Aiming at the manual "whose application nature it is further easy to use, and is wide range, and is high", a revised edition is due to carry out nine companies of consultants joint research in 2005 fiscal year (July, 2005 -March, 2006), and to be published in 2006.

Peculiar research

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| key words | Runoff analysis model, Measure against flood, CSO project |
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