

HYDROSIMS

Project Name:

Hydraulic/Hydrology Model Development and Applications for Flooding Control and CSO Mitigation in Shanghai

Client:

Shanghai Municipal Sewerage Company

Project Duration:

2002 - 2004

Project Cost (Service Fee):

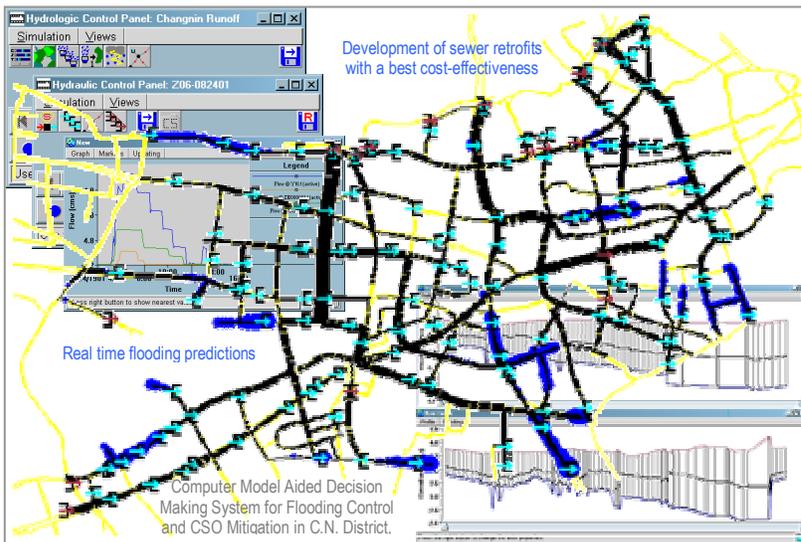
\$550,000



This project includes the model verifications based on the comparison of flooding prone areas predicted by the model with what was observed in the field. As the technology application examples, the study also accomplishes the evaluations for several flooding control engineering alternatives within the Changning District. The established computer model for the entire sewer/drainage system in Changning District consists of two components, i.e. a hydrology model for the simulation of influent flows into the drainage system, which includes more than one hundred thirty sub-catchments, and a sewer hydraulic model for the hydraulic behavior simulations of the sewer/drainage network that contains more than 4 thousand links.

The model system established in this study is not only readily applied for any alternative simulations of the

sewer/drainage engineering but also can be used as an information data base since the engineering inventory stored has very high resolution.



In addition to the engineering simulations, a part of major delivery in this project develops the state of art technology and tools for street flooding control and CSO mitigation in Shanghai and provides them to the project owner together with the related training programs. In order to effectively accomplish the technology transfer to project

owner, 85% labor as well as related budget has been used in the field (Shanghai) together with owner's technical staff. The major advantage of the sewer modeling project is not only to present a project report but also provide the SMSC the sewer hydraulic and hydrology model package together with an established hydraulic/hydrology model system jointly with solutions for flooding and CSO control. The model system could be further used by owner's team to timely evaluate a system retrofit alternative with limited effort.