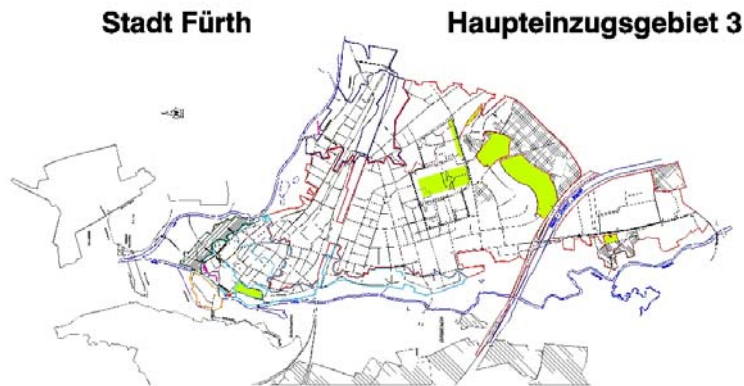


Fürth

Hydrodynamic Sewer Network Pollution Load



Client

Stadt Fürth,
Stadentwässerungsbetrieb
[City of Fürth, Drainage
System]

Period

2003 - 2006

Project Cost

not specified

Abstract

In Nürnberg-Fürth-Erlangen urban centres, treatment measures had to be carried out due to the low receiving water quantity of Pegnitz, Rednitz and Regnitz rivers. Dimensioning of the storm water overflow structures was carried out with the help of hydrodynamic sewer network (SFBS) and pollution load measurement (SMUSI) programs.

The development area of the main sewage treatment plant includes 105,000 inhabitants. Further hydraulic- and pollution load, generated by areas of Zirndorf and Oberasbach with 46,000 inhabitants should also be considered. In line with the investigations, measurements were also carried out for Fürth main sewage treatment plant. In addition, a large number of storm water retention tanks and sewers with storage capacity and overflow were considered in measurements. Improvement alternatives were surveyed for several variations (storm water tanks for settled combined sewage and sewers with storage capacity and overflow).

Scope of Service

hydrodynamic calculation of sewer networks
pollution load calculation
water law procedures

Technical Data

Length of sewer network	370 km
Storm water retention tanks	18
Storm water overflow	13
Storm water tanks with overflow	13
Sewers with storage capacity and overflow	14
Available storage volume	38,864 m ³
Allowable sewer volume	24,828 m ³
Storm water sedimentation tanks	6
Pumping stations	3