

Planning to Improve Aurora's Downtown Riverfront

With a population of 160,000, Aurora is the second largest city in Illinois. It has a combined sewer system with 15 combined sewer overflows (CSOs) that operate from 20 to 40 times a year. To ensure the success of a major re-development to provide a facelift for its downtown area and to enhance the scenic riverfront, a reduction in the frequency of CSOs and basement backups was necessary. The project included:



- Hydraulic modeling of the existing combined sewer system and the proposed storm sewer using XPSWMM
- Preliminary sizing and routing for new storm sewers up to 72 inches in diameter
- Development of a cost-effective plan to transition the combined system into a separate sanitary sewer system

A prioritized list of flow sources was developed using data collected from flow monitoring, structure inspections, television inspection, smoke testing, and building inspections. Data was electronically compiled into a Geographic Information System (GIS) to help steer the storm sewer sizing and the development of a cost-effective rehabilitation plan for the combined sewer, which was to become a separate sanitary sewer system.

