



## GIS Inventory of Combined Sewer Outfalls

**Client:** Chicago Department of Water Management

**HBK Engineering, LLC** rendered its professional services to the Chicago Department of Water Management in the creation of a database for the GIS Inventory of Combined Sewer System Outfalls. Through the coordinated efforts of a field crew to perform appropriate reconnaissance operations and engineers to deposit the gathered data into the newly created database, HBK successfully compiled a complete Project Database compatible with Chicago's Bureau of Information Systems' GIS Division.

Project required:

- Consultation with the CDOMM to discuss specific project requirements and assist the Client in scheduling, forecasting and management of the project timeline
- The development of the framework of a Project GIS Database to hold all data collected from the project.
- The determination of approximate state plane coordinates (latitude and longitude) for each outfall location using existing CDOMM atlases and BIS aerial photography. All information was collected and entered into a GIS database, without the need for field verification.
- Utilizing a pontoon type boat, CCTV Sewer Surveillance Equipment and GPS data collection methods, a three-person field crew obtained state-plane coordinates at each accessible outfall location.
- The field crew obtained digital photographs of each accessible outfall and corresponding sign, as well as a short narrative description of each outfall's physical condition.
- The field crew also used CCTV Sewer Surveillance Equipment to perform a video inspection of each non-submerged and accessible outfall, for which the length of inspection was the distance from the riverbank to the first upstream manhole not exceeding 300 feet.

