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USING GIS AND GPS FOR SANITARY SEWER CONDITION ASSESSMENT

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ABSTRACT: This paper will showcase the benefits of how geographic technology can streamline the collection and effective follow up use of utility system condition assessment surveys and other field collected data. Using field computers operating survey or mapping grade GPS and loaded with existing GIS data, field crews can access “live” maps to navigate and locate system features for inventory, inspection and condition assessment. These systems also incorporate the use of digital cameras linked to the computers to provide integrated photographic documentation and allow progress monitoring over time.

Integral QA/QC and post-processing tools are built into the data collection programs to minimize rework and facilitate direct downloads to the owners computerized maintenance management system (CMMS) and/or geographic information system (GIS). Automatic linking of all field data collected including pictures can drastically reduce or eliminate post processing needs and allows immediate use of the collected information.

This integrated tool can be used to support a wide range of field inspection activities including utility system inventories, condition assessment surveys, flow and rainfall metering, spill reporting, erosion & sediment control monitoring and other field data collection needs. This system can also provide customized output of the data with photo documentation to meet reporting needs.