GPS units from MWRD help communities map infrastructure

Communities urged to participate and help improve collection system mapping

It is no small task to identify, detail and map what appears above ground, but knowing where each pipe stretches below the earth’s surface is another challenge. Thanks to an innovative partnership through the Metropolitan Water Reclamation District of Greater Chicago (MWRD), local communities now have access to a new tool to update sewer data and develop mapping technology.

The MWRD is lending Global Positioning System (GPS) units to communities in its service area across Cook County as part of the MWRD’s Infiltration/Inflow Control Program (IICP). This program requires sewer system owners to have an accurate, current map of their sanitary sewer systems that shows the extent of their service area. The MWRD provides participating communities with Leica Zeno 20 GPS units, which come with a camera, training documents and high vertical and horizontal accuracy that maps collection systems through Geographic Information System (GIS) software. Communities from across Cook County have participated in the program, including Countryside, North Riverside, Bartlett, Richton Park, Rosemont, South Barrington and Franklin Park, with more currently registering.

“Sewer mapping is vital for effective operation and maintenance of collection systems,” said MWRD President Mariyana Spyropoulos. “Data collection among participating communities has been successful in allowing us to map this network of pipes, and we urge all communities to become involved in this important process.”

While the units are easy to use, there are other options for communities that lack resources or staff to use the equipment. AmeriCorps has provided a grant to at least one municipality to provide resources to help collect data, while the Metropolitan Planning Council and South Suburban Mayors and Managers Association are also working with the MWRD to help promote the program among communities.

Communities interested in using a GPS unit must submit a letter of intent and an implementation plan to the MWRD. The MWRD will then determine the order in which the six available units will be distributed.

To participate, government entities, such as municipalities, townships and sanitary districts, must own or operate a sanitary sewer system that discharges directly and/or indirectly to MWRD facilities or own or operate a sewer system in a combined sewer area within the MWRD’s corporate (continued)
boundaries. By entering into an intergovernmental agreement with the MWRD, government entities are allowed to use the GPS unit to collect sanitary, storm and combined sewer data to map their sewer systems with GIS software or improve their existing sewer system map. In return, the municipality will provide the MWRD with the collected sewer data.

“We thank participating communities and Ameri-Corps for their assistance in collecting this important information that will help us protect our water environment,” said MWRD Vice President Barbara McGowan. “Having this data will better prepare us to understand the elaborate systems that connect to our facilities and together we can work toward eliminating sanitary sewer overflows and basement backups.”

To learn more about participating in the data collection program and the IICP, visit [http://ii.mwrd.org](http://ii.mwrd.org) or contact MWRD Senior Civil Engineer Ann Gray at graya@mwrd.org.