EYES UNDERGROUND

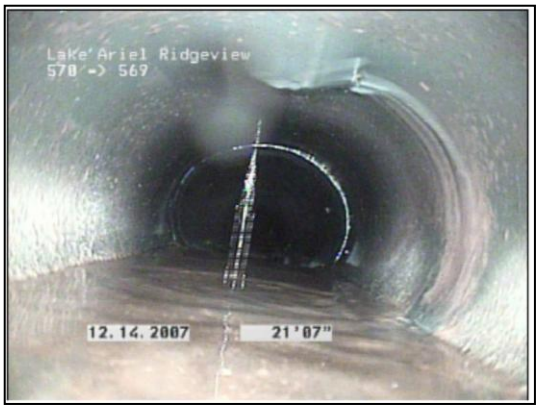
Out of sight, out of mind, that's what most sewer systems are. For this reason, they tend to get as little attention as possible. Therefore, reactive management and other complaint-driven techniques are generally the main forces used to keep them running.

Unfortunately, these are the same techniques used twenty years ago. During this earlier period, it was politically correct to direct any modernization or automation projects into more visible areas, like potable water. The only time a collection system came to the forefront was when a sewer overflowed into a politician's basement or an environmentalist's front lawn, or extensive damage was wreaked on general public property resulting in overbearing costs to the system owner. These disasters generally draw attention and action, but offer little practical information to support the solutions.

With the aging forty mile wastewater collection lines of The Hideout comes the need to carefully inspect/evaluate the existing, forty year old infrastructure. This requires additional knowledgeable staff, materials, time, equipment, and of course funding. One of the most valuable tools currently in use at RS&W is an advanced televising system which employs a tractor mounted camera that is actually driven through the sewer collection mains with the capability to pan and zoom in on defects as it travels the line deep in the ground. The tractor is lowered into a manhole to access the main line. The video image is recorded and displayed on a computer screen where the operator controls the tractor and camera, stopping it when appropriate to inspect and note problem areas such as leaks, cracks, blockages, or crushed pipe.

The infrastructure system can be a logistical nightmare unless properly managed and documented. Televising is just the beginning of an aggressive approach to the overall evaluation. The results of such an evaluation are to be used for asset management planning focused on providing the treatment works with good, reliable information through a total infrastructure management system in a format easily understood by anyone. The information gathered for management planning will then support the capital investments required to repair/replace/maintain the aging system through the future.

Tractor mounted camera being lowered into a manhole to access the main line.



Actual footage captured by tractor mounted camera of sewer collection main underground.