



GIS AS A TOOL FOR ASSET MANAGEMENT

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As a bit of history, your NYRWA entered into the mapping services arena in 2008 in an attempt to assist our member systems. One of the common issues and complaints our field staff heard on a continual basis was a lack of water or wastewater system maps. In many cases, the system maps are severely deficient, lacking any information on recent improvements, or are non-existent altogether. In an effort to address this issue, we started our mapping program which used GPS equipment to position and identify each attribute in a distribution or collection system, and then followed up with a GIS package which plotted the attributes on a paper map(s), and provided an electronic format for the data collected. While this process was successful, and provided many systems with a much needed map, we couldn't help but think there was a better way forward.

The paper map(s) was such an improvement, but the new dilemma was, how do the systems update their maps with changes going forward? The GPS equipment used was far too expensive for most systems to afford, and the GIS work involved required a high degree of training and education. Fortunately, many new cloud based formats have been developed which make mapping a water or wastewater system far less cumbersome and allow virtually anyone the ability to create a system map, make upgrades or changes to an existing map. Furthermore, the equipment is affordable, and monthly or annual service charges are well within any systems financial means.

I thought this article was about asset management? Well, it is, but I believe a preliminary discussion was necessary. Asset management seems to be the "buzz word" over the past few years in our industry. I think we all agree that managing our assets is important, but how can we achieve this goal in an easy to use manner? While we think of GIS for mapping our water or sewer lines, we rarely consider the database materials used, which can also be used for issues such as asset management and work orders for routine maintenance of our vital equipment. Many of the cloud based mapping services today also include an asset management tool, as well as some form of work order system. Not only that, but generally the information on each item such as a sewer pump, can be customized to suite your individual needs. These tools can be as simple or complicated as may be required for each individual system. For example, you could collect the GPS

location of a sewer lift station, and then add an information layer detailing the pumps themselves with items such as make, model, Hp, serial number, cost, date purchased, etc...any information you may require. Photos of each piece of equipment can be attached, as well as manufacturer specification documents, which can be viewed on the map by identifying the asset. Literally, the sky is the limit, and I know we are merely scratching the surface of what can be accomplished using such a system.

In this day and age, where each of you are asked to continually do more with less help, we are looking for tools or methods which MAY make your life a bit easier. Information storage is always an issue, and these newer mapping technologies may provide a sole source for collection and storage of the data pertaining to your fixed infrastructure assets.

This article is a brief introduction to this type of system integration, but we hope to have a far more detailed article with specific information in the near future. Technology has and seems to continue to improve quickly. We, here at your NYRWA, are trying to identify and pass along materials which can achieve your goals at an affordable cost, and most importantly, provide an ease of use so we all can continue to provide...Quality On Tap! 💧💧💧