

## Good Directions for Mapping Utilities

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How many of you would leave for a trip taking your 1960's Atlas with you or even a 1970's or 80's Atlas? Most of us, when we travel have a newer map in decent condition, unlike the older version that is tattered after all the years of use. So, why should that map of your utilities system be different than the map for a trip? I have seen it many times in this line of work, an old tattered map of a water system that is not even in color. The old map has so many scribble marks on it you can't tell if what you see is a water main, a crease made from the folds in the map, or what someone had for breakfast. In some extreme cases a system doesn't even have a utility map of their system. What happens if there is a late night utility emergency? You go to the office to find the closest shutoff valve or manhole, return to the place where the map shows the feature is at and finally, you find it an hour or so later across the street. You would not use a road map that had missing or slightly inaccurate roads so why should you use a utility map that is that way. Well, those days of hours of searching for utility features are coming to an end.

The Nebraska Rural Water Association has just started a new program called GIS/GPS mapping of utility systems. We now have the capability to come to your system, take data of points (valves, manholes, hydrants etc.) in your system, then take those points back with us and draw you a new geographically correct map. There are a few catches. First, you have to know where your points are along with any other features you want mapped. Second, this service comes with a price. However, we can give you a free estimate on how much it will cost to do your system by figuring the cost on the number of points in your system. Our plan at Nebraska Rural Water is to show that now even small systems can have up-to-date utility maps that are geographically correct.

What makes this GIS/GPS program possible? About a month or so ago Nebraska Rural Water was able to purchase a hand-held unit with GPS capability. This is not your run of the mill unit you can buy at a sporting goods store. This GPS unit will give you accuracy that is sub foot (within 4-6 inches in most cases). After your system is mapped by the Nebraska Rural Water Association no longer will there be a frantic search for valves that may or may not be there. With a map from the Nebraska Rural Water Association if a valve is on your map then it has to be there since we only mark features that we find. Even if a mapped feature such as a valve is lost in the future the GPS unit can be used to locate that feature. That means once a feature is marked it will virtually always be located. You will no longer be looking for those valves that may have been covered with silt or cement with a shovel and metal detector. If you are interested in seeing what we can do, please give me a call or e-mail and I can show you what types of maps we can make for you. I can also give you a cost estimate for mapping your utility system. In the next article I will talk about how GIS can also be used to track information in your system.