

## Global Positioning System (GPS)

GPS is a navigational system made up of a network of 24 satellites, placed into orbit by the U.S. Department of Defense. These satellites circle the globe twice a day in a very precise orbit and transmit signal information back to earth. GPS receivers take this information and use triangulation to calculate the user's exact location.

## Geographic Information Systems (GIS)

GIS combines mapping software with database management tools to collect, organize and share many different types of information. GIS can store, display, and help your utility interpret virtually all the important attributes of your system.

## Mapping Services through TRWA

Through the implementation of GPS and GIS technology, TRWA can effectively produce hardcopy and digital maps to be utilized by system personnel for water and/or wastewater facilities in the state.

With TRWA's new service, utilities can attain new and accurate maps to better manage their infrastructure assets.

## CONTACT US

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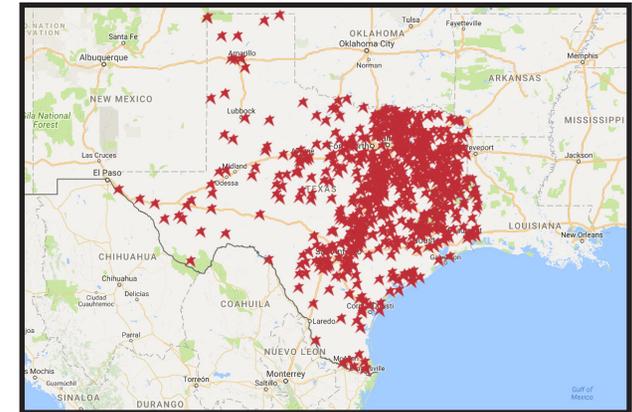
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[www.TRWA.org/GIS](http://www.TRWA.org/GIS)



## Identifying Today's Infrastructure for Tomorrow



## GIS/GPS Mapping Services

[WWW.TRWA.ORG](http://WWW.TRWA.ORG) | (512) 472-8591



## Accurate and Current Maps

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Our mapping technician will work with your system personnel to develop precise maps of your infrastructure. The data collected in the field will show the exact placement of water features such as master meters, main valves, hydrants, tanks, wells, etc. This is also true for wastewater systems in locating man-holes, lift stations, treatment plants, etc.

Additional details on these features can be added when gathering the data, such as line size, date of installation or manufacturer. Incorporating this kind of data allows you to monitor and evaluate your system at a whole new level.

TRWA will input the data from the field along with background layers, such as aerial photography, and create high quality, detailed maps of your system. At the end of the project, all data and the maps will be owned by you for future use.

## How the Program Works

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TRWA will provide a scope of work, a cost estimate for the data collection and map production and a service contract. The estimated cost is based on the number of data features to be collected and time to produce the maps.

After the contract is signed, the next step is to collect data in the field. The equipment used is accurate at less than one foot of the feature.

System personnel must accompany our mapping staff in the field to ensure we collect all the features wanted. All points needing location must be accessible to our field technician.

Next, we process all data collected to ensure accuracy. These data points are put into a GIS program to create a variety of map products.

TRWA will utilize top GIS software to create hardcopy and digital maps to the utility's specifications. The printed maps can be large-scale wall maps, showing major features with the desired layers (aerial photos, streets, topography, etc.) The printed maps can also be generated into a map book format, which is a bound book of high-detail maps printed at the best available scale.

In addition, TRWA will provide a subscription to an online mapping service called Diamond Maps and train the field staff that accompanies on how to use the software for future updates and improvements.

## Program Pricing

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TRWA members will receive reduced pricing on GIS/GPS services at \$10 per-point for on-site data collection. Reimbursement of expenses as well as mileage at the standard rate will be included in the total cost for days on site collecting data. The more accessibility and information available for collection, the faster the process.

There is a base fee that includes the hard copy production of the wall map, map book and a one-year subscription to Diamond Maps. The base fee will vary depending on the level of detail and/or imagery requested.

TRWA also offers a training option where our staff will come out for a day and explain GIS and the Diamond Maps software, assist in setting up layers and attributes based on your system's needs and assist in collecting some points within your system to get you comfortable using the software. This option includes a 30-day trial version of Diamond Maps.

This training option is at a rate of \$800 per day plus travel mileage at the standard rate. Anyone from the system can attend to get the most out of the training. For systems that take this option, and/or have their system already marked and mapped with digital software, TRWA can help by providing hardcopies at a nominal fee based on the desired product once the system is ready. These fees will vary depending on the situation and work involved.