



**Mobile Capability
for IRWA GIS Mapping Program**

By: Don Craig, Deputy Director

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Water Matters

Some months ago, I met in Champaign, with Ben Hill of Diamond Maps, Inc., located in Brownsburg, Indiana near Indianapolis. We went over discussions of setting up a new partnership, to improve our existing GIS Mapping Program, by enabling the extra dimension of mobile capability for our facilities that have had, and will have, mapping completed... for their water, sanitary, and storm sewer systems by IRWA.

Of course, we will continue to do our existing program of GPS data logging, and GIS map processing, as we have for a number of years now...and still provide the same service and deliverables as we have in the past. But, this additional element of allowing the system the ability to access their particular system map online, and pull up information about each valve, meter, curb stop, hydrant, manhole, lift station, etc.,...in the field, and on the go, is positive plus, to say the least.

It's been a steady progression of getting the program setup, to allow uploading of our existing system maps, and any new projects, onto their server for mobile and even static desktop viewing. Basically, Diamond Maps is cloud based asset mapping system designed for small utilities and specializing in water, wastewater, and storm water. The only prerequisites are an internet connection via wired, wireless, or cellular on your smart phone, tablet or computer. I have been adding existing IRWA projects to their server, for this service; and, have contacted facility personnel about the logging on process, and aspects of the mobile capability. I will continue to add more of our existing systems, in December, to the Diamond Maps server, and be in contact with system staff to make them aware that the service is available to them. Also, new projects will automatically be added to their server.

Within our agreement with Diamond Maps, IRWA has administrative control over all map projects completed by our organization, and uploaded to the server. And, once set up, system personnel will have an account access through a username and password, to their own particular map(s). The best part for each system is that IRWA will take care of the cost for the first year of one account subscription to the service, as part of our deal with the utility. And, beyond that, the system will have the right to retain the mapping access service capability, at their expense... which is very low, indeed. At present, the monthly rate is only \$19.00 per account. If the system chooses to drop the service access, there is no penalty or problem with doing so.

The best part for each system is that IRWA will take care of the cost for the first year

Diamond Maps is very good to work with, and will be there for any problems or questions you may encounter, while using the service. It should also noted, that the company is working with several other state rural water associations around the country, with

similar tasks. I would ask all readers, who are discussing or interested in our GPS/GIS mapping program to contact myself, and also, to access the Diamond Maps website, to review all the features and overview videos that are available there. Their site, can be accessed on the internet, at: www.diamondmaps.com

And one last thing..., Ben Hill of Diamond Maps will be speaking at our February annual conference in Effingham, in regard to our partnership; and go over all the facets of how to use their site to your best advantage when accessing your particular map. We encourage everyone interested to attend the Conference, and especially that particular session.

Everyone have a great and safe holiday season!

IRWA'S MISSION STATEMENT

“Protecting and preserving the water and wastewater resources of Rural Illinois through education, representation and on-site technical assistance”



By: Roger Noe, Circuit Rider

The revised Total Coliform Rule became effective April 2016. The rule requires all water supplies to be monitored for the presence of total coliform in the distribution system. The absence of total coliform in the distribution system minimizes the likelihood of fecal coliform being present. I have been getting questions about the rule and what happens if a sample comes back positive. I am going to give an overall view of the new rule and proper sampling procedures to insure you have a good sample. Chapter 3 in the IEPA Sampling Handbook explains everything you need to know about the rule.

Total coliforms are a group of close bacteria that are not usually harmful to humans. They are an indicator that other pathogens may be present in the water. Total coliform serves as an indicator of the efficiency of the water treatment plant and integrity of the distribution. E.Coli is a more specific indicator of fecal contamination and potential harmful pathogens in the water.

Every water system is required to do a routine coliform sample from the distribution system per month based on the population. You may have to take raw, finish, and distribution samples depending on your water treatment facility and source water. Your Regional IEPA office will work with you on your sampling location plan. You must take the sample from the address that is on your sampling plan. If a location needs to be changed, talk to the IEPA before you do anything and get the approval that is needed. Make sure the location has a good faucet, with a smooth surface and no threads. Also make sure the location can have water running for 30-60 seconds, or long enough for you to feel confident in taking a good sample. You would want to have the location to be accessible for the sample. Sampling stations are becoming more popular to take the routine samples.

Sampling

Be very careful when collecting coliform samples. Only use bottles from a certified laboratory. When you receive the bottles make sure there are no loose caps, missing caps, or damaged bottles. If you are questioning the bottles integrity, dispose the bottle and get a new one. The bottles need to be stored in a safe and clean environment. Open the faucet until a consistent flow is obtained. Allow

the water to run until you have the service line flushed. Take a chlorine sample to check the chlorine residual in which you will have to report on your paperwork. When you remove the cap, keep the cap threads down and fill the bottle to 100ml. Try not to have any kind of splashing on the bottle. When you have reached 100ml immediately put the cap back on. Never sit the cap on anything or touch the inside of cap or bottle with your fingers. This is one of the easiest ways to get a bad sample result.

Make sure the paperwork is completely and correctly filled out. The laboratory must receive the sample within 30 hours of collection.

Positive Sample

If you have a distribution sample that comes back positive for coliform bacteria you will have to repeat samples. The laboratory and Regional IEPA office will contact you about the positive sample. If the sample site failed, you will have to take a sample upstream, downstream, and at the original sample site. That means 3 samples will have to be taken for the sample site that came back positive. If a sample comes back from the water treatment facility, only one repeat sample should be collected from a positive finished entry point or raw water entry point. The sample must be taken within 24 hours of being notified for a positive sample for distribution and treatment facility. The water system should always have extra sample bottles for any possibilities of repeat samples. If the water system has an indication of coliform contamination an ASSESSMENT is triggered. An ASSESSMENT is a written evaluation of the water system. The purpose is to help identify any sanitary defects that indicate failure in the water system. There are other violations that the water system could receive if coliform samples are positive with different stipulations. Chapter 3 in IEPA sampling handbook explains in great detail all of the violations and how to correct and resolve the violation.

If you ever have any questions about sampling, paperwork, or positive results, feel free to contact Illinois Rural Water Association and we will assist you.



HAPPY HOLIDAYS FROM THE IRWA BOARD AND STAFF!!

**WATCH YOUR MAILBOX FOR
INFORMATION ON THE**

35th Annual Technical Conference

February 21-23, 2017

Keller Convention Center - Effingham, IL



Key to Success

- 13 Credit Hours Available
- Water and Wastewater Sessions
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VIDEO INSPECTION SERVICES

Video inspection technology can help you identify and prioritize maintenance issues, while improving service and reducing emergency maintenance costs.



IRWA is excited to introduce our new Video Inspection

Service to our members. The normal fee for this service is \$350.00 for small projects, larger projects requiring more than 1 day will be based on cost per foot.

A contract must be signed in advance of the inspection. Upon completion, your system will be invoiced for the services and will also receive a detailed report including diagrams of the inspection features, and a DVD for your references.

For more information, or to schedule an inspection of your system, please call our office at 217-287-2115 or visit our website: www.ilrwa.org