

Oxford Water Works & Sewer Board Unlocks the Power of ArcGIS® for Water Utilities



Oxford Water Works & Sewer Board is located in Oxford, Alabama – about an hour east of Birmingham, Alabama. Oxford has a population of 22,300 and Oxford Water has about 9,800 water customers in the community.

A few years ago, Oxford Water was facing a number of data-related challenges. With no GIS, teams were relying on old CAD maps, hand-drawn valve location drawings, and very few as-built maps. Their field crews were working off of memory and old paper maps that were in poor condition...and the GPS equipment they eventually purchased for locating assets was not providing the accuracy they needed. The equipment was also cumbersome to work with, as it required quite a bit of the data to be hand-typed into their database. Even their billing system, at the time, did not make it possible for the transfer of data – so all of it needed to be hand-typed into their database. They needed help creating a far more efficient data environment that would cut down on the workload and provide easy and accurate access to the wide variety of people who would need it.

To meet their challenges, GISinc traveled to Oxford to take a look at the data environment Oxford Water had in place and plan the road ahead. After offering suggestions, solutions, and analyzing their data transfer issues, we got to work on a plan of action that involved setup of Esri's Local Government Information Model (LGIM).

We initiated and applied a few editing templates and ETL tools to make data transfer easier from the data collectors to the database. Since the setup of LGIM, we have worked with Oxford Water on additional solutions for online mapping and data collection applications for field crews – as well as other team members who need access to the data.

Today Oxford Water is up and running. With an upgrade to Enterprise Server, their editing environment has greatly improved; data within their billing system can now be viewed through ArcGIS; and field crews and office staff have mobile applications that allow them to interact with data including an Isolation Trace app, Fire Hydrant Inspection app, infrastructure app, Map Change Request app, and a Main Break & Leak Response app.

As much as the utility gained by delivering data to users and configuring workflows by wiring together a series of apps, Oxford Water also recognized the need for more structured, holistic asset management. GISinc helped strategize on different approaches and implementation patterns and ultimately Cityworks was identified as the right solution.

Customer Control Panel - 05704-00 - AMANDA MOORE

Account: 05704-00
AMANDA MOORE
86 SOUTHWOOD DR
OXFORD, AL 36203

Current
Balance: \$15.30
Paid due: \$0.00
Last billed: 12-09-2015 \$15.24
Due date: 12-28-2015
Last payment: 12-02-2015 \$15.30

Location: 0000016-007395
96 SOUTHWOOD DR
Oxford, AL 36203

Cycle: ZONE 3 ROUTES
Route: 15-15
Class: RESIDENTIAL
Dist:
Parcel No:

Cityworks

Customer: Contacts Location Notes History Usage Service Orders Arrangements

Service: All Metered Services First Chart

Date	Service	Rate Code	Actual	Billed
12/9/2015 WATER	752N3		500.0000	500.00
11/9/2015 WATER	752N3		500.0000	500.00
10/9/2015 WATER	752N3		500.0000	500.00
9/10/2015 WATER	752N3		500.0000	500.00
8/10/2015 WATER	752N3		300.0000	300.00
7/10/2015 WATER	752N3		400.0000	400.00
6/10/2015 WATER	752N3		500.0000	500.00
5/11/2015 WATER	752N3		500.0000	500.00

Meter details

Meter	Prior Date	Current Date	Days Rel	Prior Read	Current Read
0540342	10/09/2015	11/02/2015	24	304.0000	308.0000

Print

Back Refresh Add Move Payment Misc Fee Transfer Balance

Cityworks Interface

CUSI-Cityworks Interface

Create a Service Request or Work Order

CUSI Information

Installation ID: 7083, Type: Meter

Account No 000000160486 Meter ID 1175170

Address 2 N Abbottswell RD Last Reading 15829

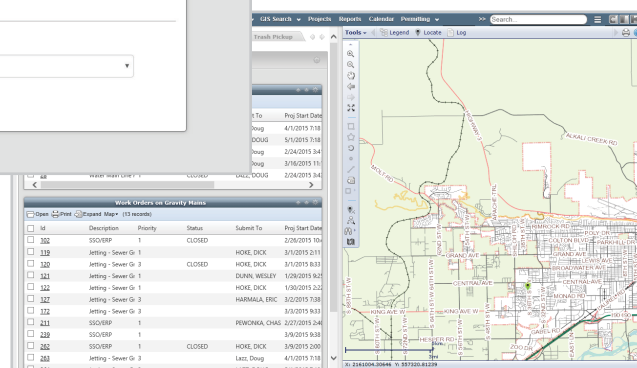
EID Number Last Reading Date 2013-05-31T00:00:00

Select Action
☒ Service Request ☐ Work Order

Service Request

Problem Backup in Channel

Submit Cancel



The implementation is largely a standard configuration of Cityworks Asset Management System, leveraging a combination of identified Service Requests, Work Orders, and Inspections. The City was also using CUSI for utility billing, however, which had a legacy feature to track service orders. also using CUSI for utility billing, which had a legacy feature to track service orders. Rather than having two systems track similar or redundant data, GISinc and Oxford Water determined that an integration that transferred this function between the systems would produce the most seamless user experience. GISinc then worked directly with CUSI to establish the mechanics of the integration, which were largely focused on transitioning a user working within CUSI over to a middleware interface during certain trigger events. Leveraging this approach, Oxford Water could retain their billing system and not have to re-train staff, yet the information was tracked to a singular system.