

“Global Green Billing”

February 2009

Global Water

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Global Water

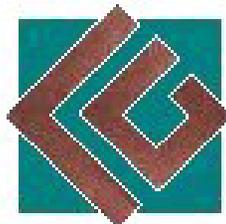
- Southwestern US company with award winning management team. Local management. Local decision making.
- Owner and operator of 16 private regulated Water, Wastewater and Recycled Water utilities in three counties.
- 90 water and wastewater professionals on staff.
- Sophisticated financing capabilities.
 - Deployed \$150MM in equity in City of Maricopa since Jan 2004.
 - Issued \$116 MM in tax exempt bonds to date.

Global Water

- Focused on water scarcity management through extensive water recycling and reuse programs.
- Strong relationships with state regulatory agencies.



- Five existing very successful P3's with the Cities of Maricopa, Casa Grande, Buckeye, Eloy and the Ak-Chin Indian Community.



The Sign of the Times



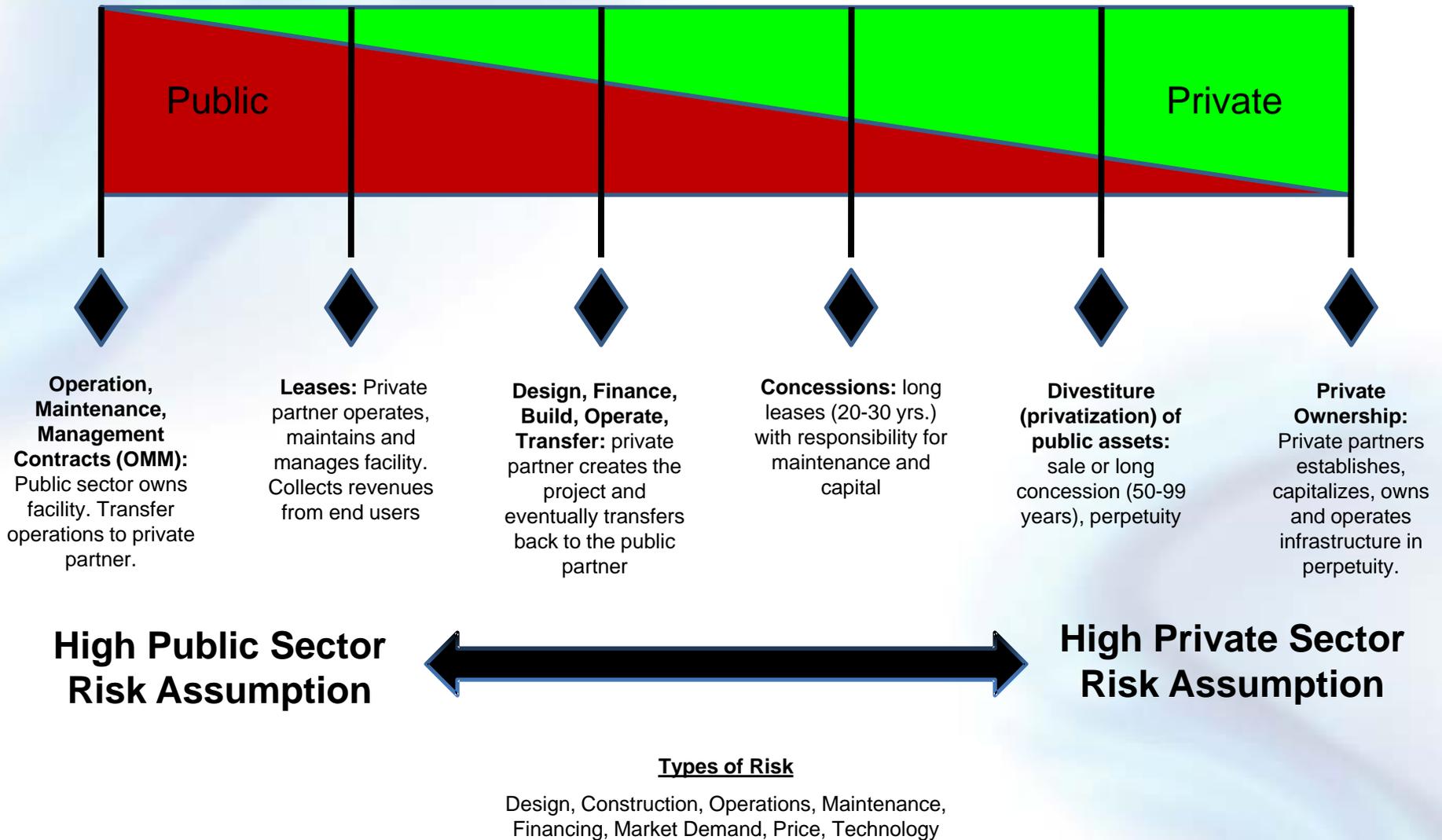
Public-Private Partnerships (P3s)

Public-Private Partnership (PPP) is a system in which a traditional government service is provided through a private business partner or funded and operated through a partnership of government and one or more private sector companies. These structures are sometimes referred to as PPP or P3.

Reasons for P3s

1. Risk Transfer / Sharing
2. Economic Development / Creating Jobs
3. Financial Benefit / Cost Avoidance
4. Service Delivery Acceleration

P3 Risk Continuum



Drivers to Develop Global Green Billing

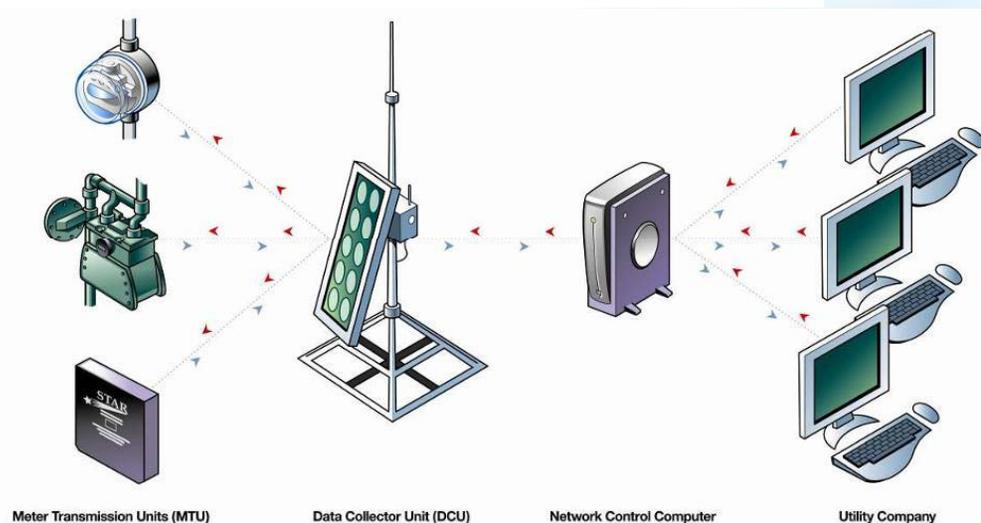
- **Drivers:**
 - A requirement for more timely more accurate data
 - A requirement for improved customer satisfaction
 - A frustration with the manual meter reading process:
 - Meter access
 - Inherent Labor Issues
 - Costs increasing faster than revenue
- *“AMR arose out of a critical need to have timely, accurate data and the frustration in getting it.”* Trevor Hill

Introducing Global Green Billing

- **A totally green solution:**
 - A green meter read – 180 times per month
 - A green data transfer – no vehicles used to collect reads
 - A green bill – electronic if requested (emailed directly to the customer)
 - A green remittance – customers can pay via the internet, credit card, over the phone, Kiosks
 - Green water consumption reports – accurate & timely
- **A new customer service tool:**
 - Report odd usage – Leak report that looks for odd usage
 - A visual display for customers (eCARE web portal for customer service)
 - A contrast of customer usage against their neighbor, street, city (this promotes changes in behavior for conservation)
- Global Green Billing (“GGB”) sends a signal – we’re interested in where the water is going, we are interested in timely accurate data, we are interested in conservation – our money is where our mouth is.

AMR Evolution

- **Manual Reading:**
 - Transposition errors
 - Labor intensive
 - Write everything down twice
 - Poor customer tracking
- **Touch Reading:**
 - Eliminated errors
 - Slight labor improvement, but still labor int
- **Drive by Reading:**
 - Eliminated errors
 - Improved labor
- **Automated Meter Infrastructure:**
 - Eliminated errors
 - Excellent customer tracking
 - Eliminated labor
 - 100% green



Valencia Hexagram AMR

- Field deployed data collection units
 - Tank Mounted unit



Valencia Hexagram AMR

- Field deployed data collection units
 - Pole mounted units



Customer Information System

Customer Account Inquiry

Previous Active Next Refresh 1 1 Search Edit Add Contact End Exit

Previous Filter Next Current Tasks Done Arrange 00013606 030332952 11/17/2008 01:18:50

Customer: 00013606 Account: 030332952 ALICE GARDNER 1901 S 19TH ST ASHEVILLE, NC 32033	Balance: \$140.89 Deposit: \$0.00 Last Bill: \$87.26 Due 04/28/03 Plan: None Next:	Active Tenant Credit is Good (16) DEMO/UTILITY Cycle 13/	Residential Move Out 12/30/99 / In 07/02/96 No Tasks to be completed on file Collections Okay	00101126-OUTSIDE;90692 No Service Orders to be coi
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Customer Service Address Customer/Account Services Addresses Reading History Transaction History Bills Comments Move In/Out ACH

Deposits Meter Reading Contact Equipment Supplier Loans/POS Collections Map Solid Waste Spreadsheet

CADASTRE
GROUND
INSTALLATIONS
WATERMAINS
HOUSES
MANHOLE
STREET

STREET
 Show Layer
+ Add - Remove

The main window displays a map with blue buildings and orange triangles, representing a residential area. The interface includes a toolbar with various navigation and search icons, and a sidebar for layer management.

Customer Information System

Customer Account Inquiry

00013606 030332952 11/17/2008 01:22:48

Customer: 00013606
Account: 030332952
 ALICE GARDNER
 1901 S 19TH ST
 ASHEVILLE, NC 32033

Balance: \$140.89
Deposit: \$0.00
Last Bill: \$87.26 Due 04/28/03
Plan: None
Next:

Active Tenant
 Credit is Good (16)
 DEMO/UTILITY
 Cycle 13/

Residential
 Move Out 12/30/99 / In 07/02/96
 No Tasks to be completed on file
 Collections Okay

00101126-OUTSIDE;90692
 No Service Orders to be coi

Bill Number	Bill Type	Bill Date	Due Date	Balance Forward	Previous Billing	Cancelled Billing	Transactions Since	Current Tran
814901	Cycle Billing	04/07/2003	04/28/2003	\$0.00	\$0.00	\$0.00	\$0.00	\$87.26
814902	Cycle Billing	02/28/2003	03/21/2003	\$0.00	\$0.00	\$0.00	\$0.00	\$112.76
814903	Cycle Billing	01/25/2003	02/15/2003	\$0.00	\$0.00	\$0.00	\$0.00	\$188.31
814904	Cycle Billing	12/23/2002	01/13/2003	\$0.00	\$0.00	\$0.00	\$0.00	\$102.90

Batch ID:
 Bill Number:
 Bill Type:
 Billing Date:
 Due Date:
 Deposit:
 Cancel:
 No Bill:

Balance Forward:
 Previous Bill:
 Previous Cancelled Bill:
 Pending Bill:
 Current Bill:

Amount Before Due Date:
 Penalty Base:
 Penalty:
 Amount After Due Date:

Date Change Reason:
 New Due Date:
 User ID:
 Date/Time Changed:

Customer Web Portal

eCare > Home - Windows Internet Explorer
 http://ecaredemo.advancedutility.com/Home/tabid/51/Default.aspx

WENDY BROCKLEBANK (Monday, November 17, 2008)

Customer/Account #: 070291 - 00030175
 232 MAIN ST
 Cambridge ON N1R1W8
 Balance: \$79,072.88
 Due Date: 6/1/2007
 Account Status : Finalled

Home Help Contact

Billing History Select This Year: 2007

Bill Date	Balance Forward	Current Bill	Bill Total	Web Bill
6/1/2007	\$145.89	\$79,072.88	\$79,218.77	
5/16/2007	\$0.00	-\$145.89	-\$145.89	
4/23/2007	\$0.00	\$145.89	\$145.89	View

Bill History

Billing Date	Amount
Jun 1, 2007	79,072.88K
May 16, 2007	-145.89
Apr 23, 2007	145.89

Navigation: Main (List Accounts, Change Profile), Account Options (Billing History, Service Orders, Meter Reading History, Usage History, Service Information, Transaction History, PAP/ACH, Deposit), Online Services (Make a Payment, Moving?, Report a Problem, Submit a Reading), Online Forms (Energy Savings Survey), About eCARE (Why eCARE?)

Done Internet 100%

The Benefits of Integration

- AMR provides timely, accurate meter reads
- AMR data is automatically uploaded into Customer Information System (CIS)
- CIS calculates bills and creates a bill file which is electronically transferred to customers by email and a third party bill production company. Bills are printed and mailed utilizing CASS certification to reduce postage costs and labor.
- Customers make remittances the following ways:
 - Retail Lockbox (integrated to CIS)
 - Internet Bill Pay (integrated to CIS)
 - Kiosk Application (Integrated to CIS)
 - E-Care (customer Service Portal)
 - IVR (payments over the phone)
 - IVR (automated collection process)



1805596 www.fotosearch.com



Benefits of Global Green Billing

- Save time with automated meter reading and elimination of redundant data entry.
- Save money on labor and vehicles collecting meter reads and printing bills.
- Save the environment by using less paper for billing and payment processing.
- Save water by tracking it closely and reporting abnormal usage.



Save 4 Resources
With One Click

Utility Planning & Optimization Solutions

- Coordinated Master Planning & Regulatory Approvals
- Geographic Information Systems (GIS) The power of the database (information on demand)
- Computerized Maintenance Management Systems (CMMS), Asset Management, Cityworks, Plan4D, Inframap and iWater
- Control & Power Management
- Waster & Wastewater Modeling
- Plan review, modeling, design, procurement, construction management, inspection and commissioning



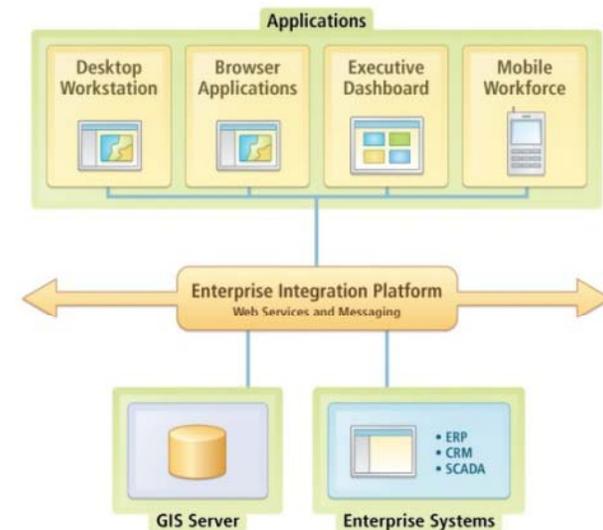
Geographic Information Systems

- Organize your information and knowledge.
- Make informed decisions.
- Improve communication.
- Increase efficiency.
- Share your knowledge with others.



Advantages of an Enterprise GIS

- An enterprise GIS provides broad concurrent access to geospatial data and applications throughout the organization.
 - Provides a common infrastructure to build and deploy solutions.
 - Extends geospatial capabilities to nontraditional users of GIS.
 - Improves capabilities of other enterprise systems (databases) by leveraging the value of geographic information.
 - Increases overall operating efficiency through the more effective and consistent use of GIS across an organization by reducing data redundancy and increasing data accuracy.





Advantages of a CMMS



- Cityworks is the only GIS-centric Computerized Maintenance Management System available
 - Uniquely designed to fully leverage your investment in GIS without costly duplication of data, risky synchronization or integration
- Manage your day-to-day operations, receive and react to customer concerns, issue and track work orders, and manage labor, material and equipment
- Visualize scheduled work, ongoing activities, recurring maintenance problems and historical information

Advantages of infraMap

- Integrated with Cityworks
- Easy to use field deployed application for non-GIS professionals (“IPOD” for operators)
- Directly connects to hydraulic valve machine to record data
- Provides easy to use tools for:
 - Redline capability
 - Isolation tracing
 - Create reports with one click of the mouse



Resulting Advantages and Benefits

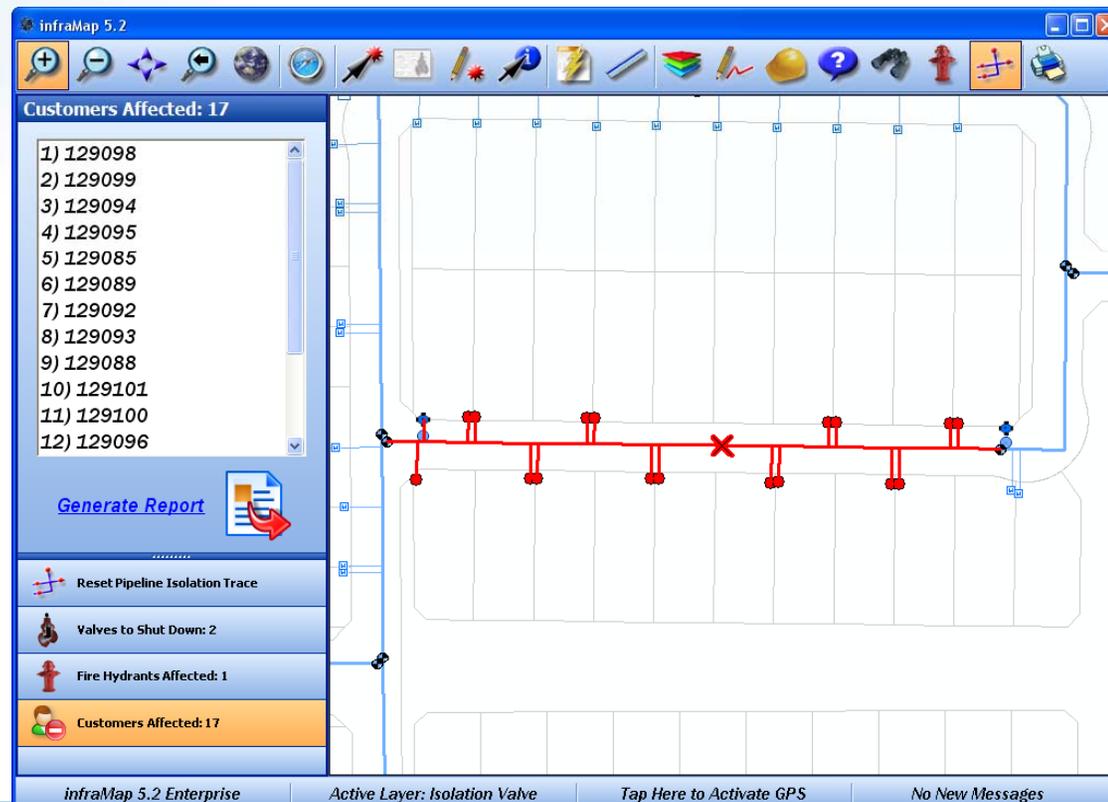
- Visualize scheduled work, ongoing activities, recurring maintenance problems

The screenshot displays the InfraMap 5.2 software interface. On the left, a 'My Work Orders' panel lists four items: 1) Wvr - Whydrant - Emergenc, 2) Wvr - Wisovalve - Emergenc, 3) Wvr - Wisovalve - Remove, and 4) Wvr - Wisovalve - Replace. The main map area shows a network of water pipes with several work orders marked by yellow icons and labels: 'Water # 10130 WVR WVR - wisoValve - Remove', 'Water # 10134 WVR WVR - wisoValve - Exercise', and 'Water # 10148 WVR WVR - w5mplStation - Abandon'. A blue arrow points from the 'Water # 10134' label to a detailed 'Work Order # 10128 WVR - wHydrant - Emergency Repair' window on the right. This window contains a form with fields for 'Description', 'Number', 'Status', 'Priority', 'Requested By', 'Initiated By', 'Submitted To', 'Supervisor', 'Opened By', 'Projected Start/Finish', 'Actual Start/Finish', 'Units Accomplished', 'General Location', 'Comments', and 'New Comments'. A table at the bottom of the window shows a sequence of tasks with their status and completion dates.

Sequence	Task	Status	Proceed	Rework	Assign
1	CHECK ALIGNMENT	CURRENT	N	N	
2	CHECK ALIGNMENT	COMPLETE	Y	N	

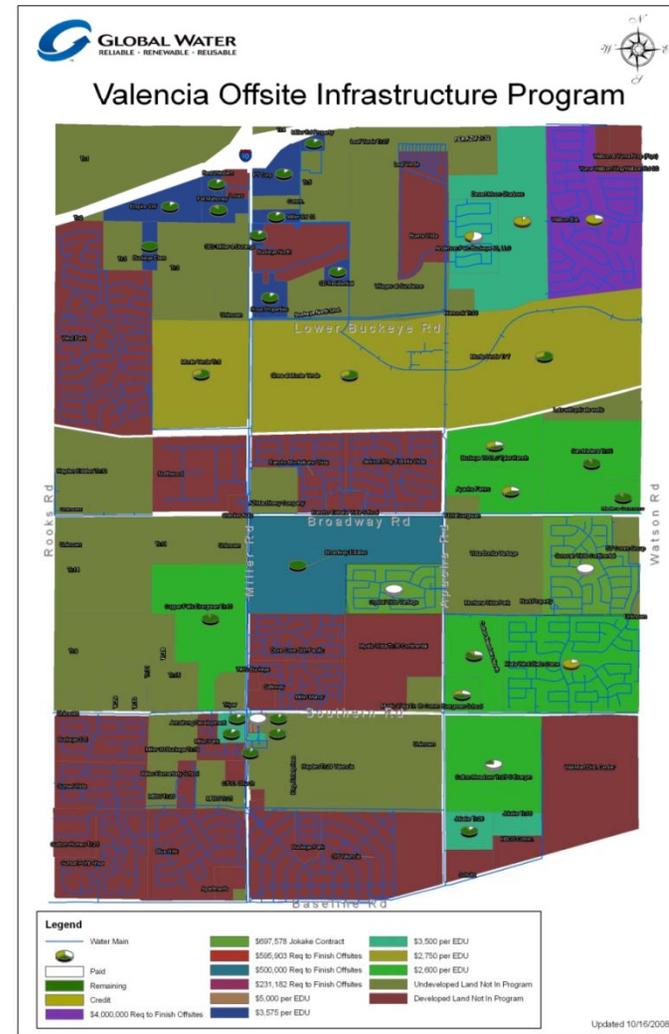
Resulting Advantages and Benefits

- Network tracing to analyze which customers will be impacted by events such as main breaks



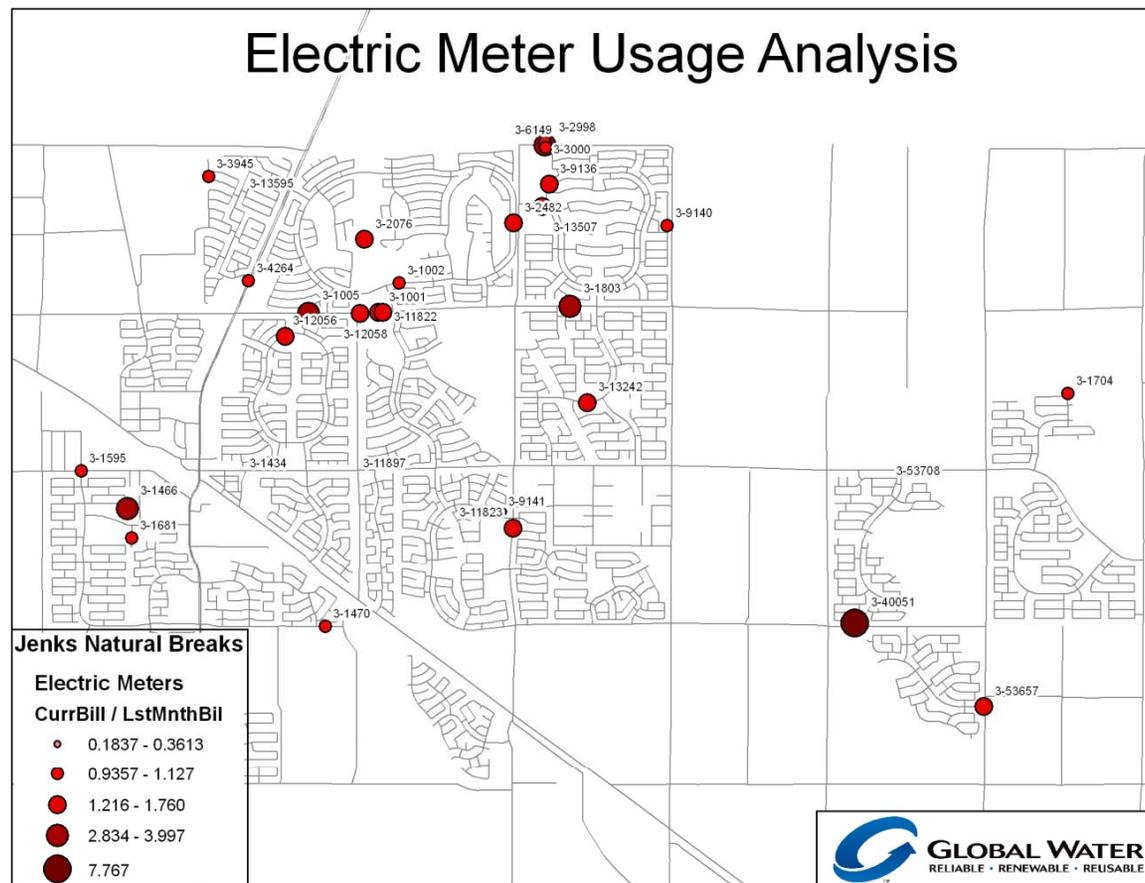
Resulting Advantages and Benefits

- Budget forecasting
- facility inventory analysis
- Production Capacity
- Distribution Capacity
- Improves communications to the development community



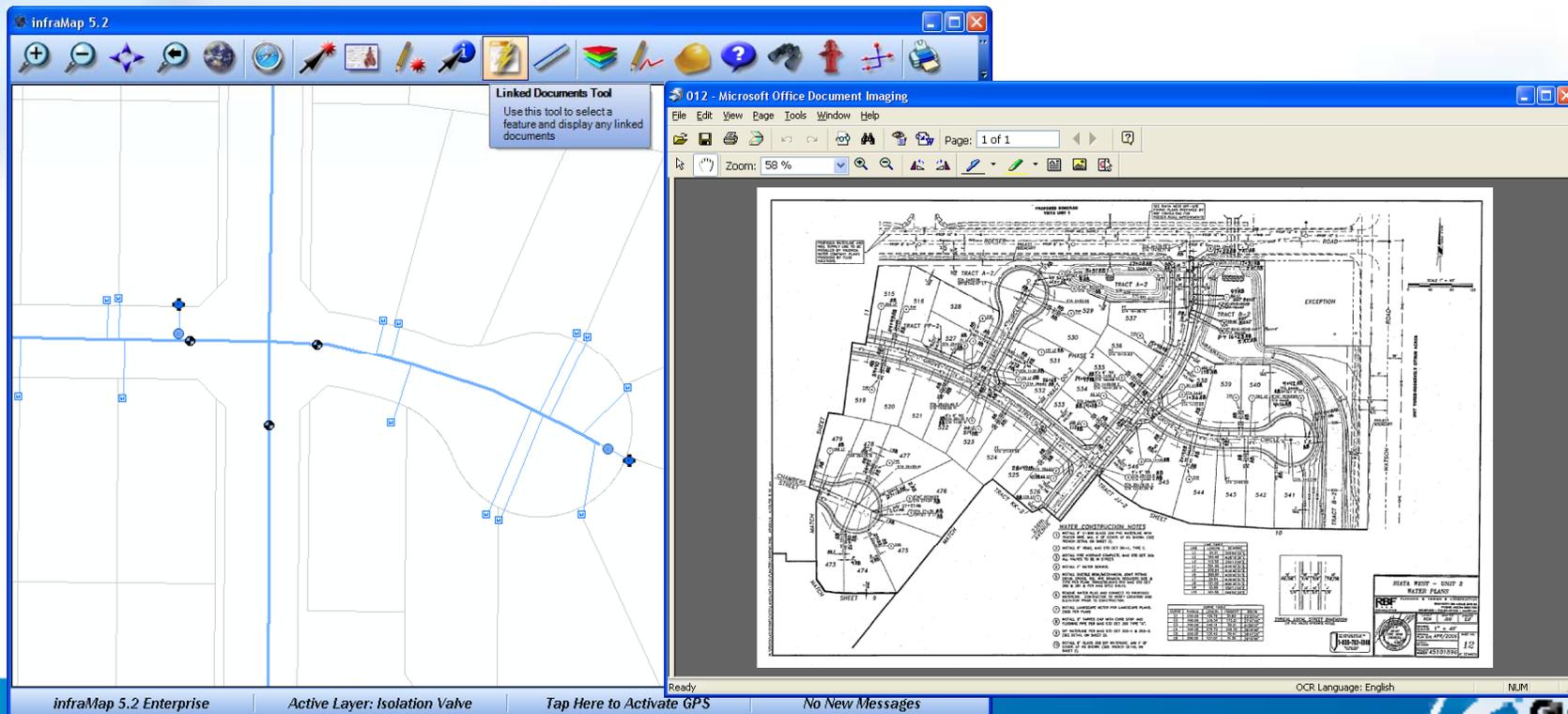
Resulting Advantages and Benefits

- Increase operating efficiency through data analysis



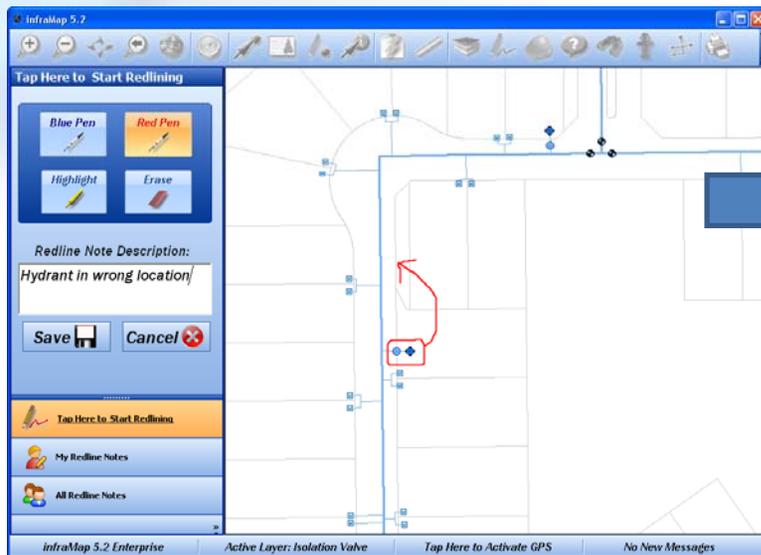
Resulting Advantages and Benefits

- Track and visualize information relating to projects, permits, construction, work order management, inspections and as-built.

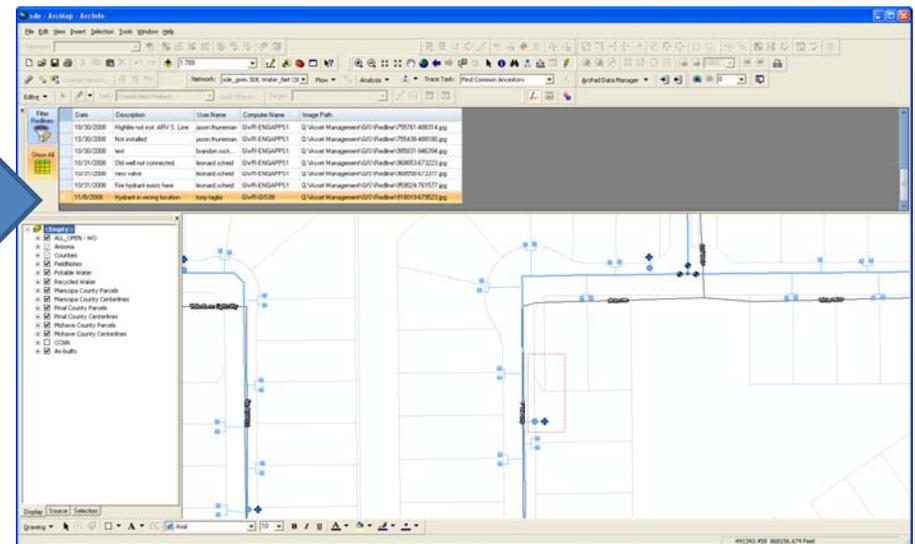


Resulting Advantages and Benefits

- View live/real time data.
 - Send red line updates from the field to the office with the click of a button.



Field Application



Office Application

Resulting Advantages and Benefits

- Track real property

The screenshot displays the 'WVR Water Assets' web application running in Microsoft Internet Explorer. The interface includes a navigation pane on the left with a compass rose and a 'Map Contents' list. The main area shows a map of a residential area with various water assets overlaid. A specific well is highlighted with an orange hatched pattern. The 'Results' panel on the right provides detailed information for the selected well.

Map Contents:

- WVR_Water_Assets
 - Water Assets
 - Deeds
 - Subdivisions
 - Mohave County Centerlines
 - Maricopa County Centerlines
 - Mohave Parcels
 - Maricopa Parcels
 - CC&N
 - Arizona
 - Township & Range
 - Section

Results:

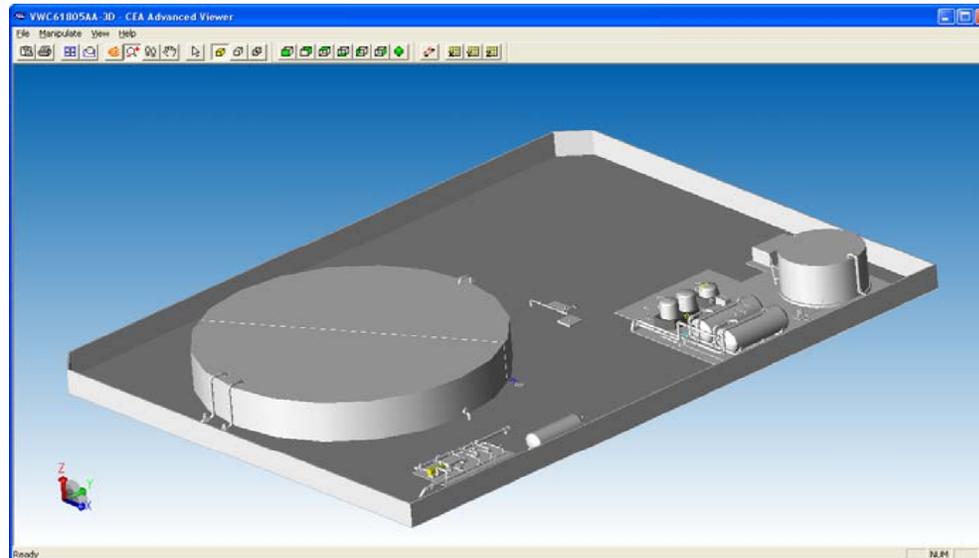
- WVR. Water Assets (504709.5298, 873884.4999)
 - Maricopa Parcels
 - Deeds
 - Sonoran Vista SE Well
 - OBJECTID: 7
 - Name: Sonoran Vista SE Well
 - Utility: Valencia Water Company, Town Division
 - APN Number: 504-41-001E
 - Status:
 - Recording Number: 2004-1508898
 - Acres: 0.19898
 - Facility ID: 7
 - Shape.area: 8667.623007
 - Shape.len: 429.035673

Resulting Advantages and Benefits

- Track location and condition of assets
- Capital improvement project tracking
- View SCADA alarms over your entire service area on one screen
- Water distribution system master planning
- Collection system master planning
- Recycled water system master planning
- Compliance notification
- Model water and wastewater networks

Management Reporting

- Customer Data – new accounts, vacant accounts, delinquent accounts, disconnects and disconnects with usage.
- Consumption Data – pumped to billed, zero usage, excess usage/potential leaks and total demand.
- Efficiency Data – trend analysis (consumables per 1,000 gallons, power per 1,000 gallons and labor per 1,000 gallons).
- Compliance Data – regulatory reports completed, pending compliance reporting and annual reports.



Software as a Service (“SaaS”)

- Access to powerful cost-saving and efficiency-generating tools, quickly deployed into your utility.
- Leverage the investment and learning Global made in utility optimization.
- Applications are hosted in a third party data center so your data is secure and available 24 x 7 from your office or in the field.

