

**BERRYVILLE TOWN COUNCIL STREETS AND UTILITIES COMMITTEE
MEETING AGENDA
Berryville-Clarke County Government Center
101 Chalmers Court, Second Floor
A/B Meeting Room
Regular Meeting
April 25, 2017
Noon**

<u>Item</u>		<u>Attachment</u>
1. Call To Order		
2. Approval of Agenda		
3. Discussion	Water and Sewer Availability Fees	1
4. Discussion	Utility Customer Portal	2
5. Updates	Public Works / Public Utilities	
6. Closed Session	No Closed Session Scheduled	
7. Other		
8. Adjourn		

↑ Denotes an item on where a motion for action is included in the packet

Attachment 1

TOWN OF BERRYVILLE
SCHEDULE OF WATER AND SEWER FEES AND CHARGES

Effective ~~June 24, 2015~~ May 10, 2017

I. USER FEES

A. WATER

\$8.40 per 1,000 gallons of usage
 \$5.00 per month minimum charge

B. SEWER

\$ 17.00 per 1,000 gallons of usage
 \$ 15.00 per month minimum charge

II. DEPOSITS AND ADMINISTRATIVE FEES

A. DEPOSITS

Residential: \$ 225

Business/Commercial (excluding Restaurants and Laundries): \$ 860

Restaurant: \$ 785

Laundry: \$2,450

B. ADMINISTRATIVE FEES

Late Fee: 10% of bill amount

Service Disconnection/Reconnection Fee: \$40

Returned Check/ACH Fee \$25

III. AVAILABILITY FEES

A. WATER

	Type of Premises	Charge
1.	Residential:	
	Single Family Residential individual 5/8" meter	\$ 5,250 + meter charge
	Town House, Duplex individual 5/8" meter	\$ 5,250 per unit + meter charge
	Multi-Family	\$ 4,725 4,200 per unit + meter charge

2. Commercial, Industrial, Institutional, & Single Family greater than 5/8" meter:

Water Meter Size (Inches)	Demand Ratio	Radio Read	
		Avail. Fee	Meter Cost
5/8	1.0	\$ 5,250	Meter cost + 30% admin. fee
3/4	1.5	7,825	Meter cost + 30% admin. fee
1.0	2.5	13,125	Meter cost + 30% admin. fee
1.5	4.375	22,970	Meter cost + 30% admin. fee
2.0	8.0	42,000	Meter cost + 30% admin. fee
3.0	16.0	84,000	Meter cost + 30% admin. fee
4.0	25.0	131,250	Meter cost + 30% admin. fee
6.0	50.0	262,500	Meter cost + 30% admin. fee

Greater than 6", Demand Ratio (AWWA M22) multiplied by fee for Demand Ratio 1

Notes:

- (a) Multi-family residences are defined as any master metered group of apartment, town house, condominium or other residential units with each unit containing separate kitchen facilities.
- (b) In cases where a master meter is serving multi-family residences or a combination of multi-family and commercial units, the applicant will pay a fee based on the higher of (a) an amount derived by multiplying the unit charge of ~~\$5,250~~ **4,200** for multi-family residence times the total number of residential and commercial units to be served by a single meter, or (b) an amount based on the meter size as specified above.

B. SEWER

Water Meter Size (Inches)	Demand Ratio	Avail. Fee
5/8	1.0	\$ 22,750
¾	1.5	34,125
1.0	2.5	56,875
1.5	4.375	99,535
2.0	8.0	182,000
3.0	16.0	364,000
4.0	25.0	568,750
6.0	50.0	1,137,500

Greater than 6", Demand Ratio (AWWA M22) multiplied by fee for Demand Ratio 1

IV. LATERAL or CONNECTION FEES

A. WATER

Meter Size (Inches)	By Others	By Town
5/8	* (b)	cost + 10% (\$500 min.) & b
3/4	* (b)	cost + 10% (\$500 min.) & b
1.0	* (b)	cost + 10% (\$500 min.) & b
1.5	* (b)	(c) & (b)
2.0	* (b)	(c) & (b)
3.0	* (a) & (b)	(a) & (b)
4.0	* (a) & (b)	(a) & (b)
6.0	* (a) & (b)	(a) & (b)
Greater than 6"	* (a) & (b)	(a) & (b)

B. SEWER

Lateral Size (Inches)	By Others	By Town
4	*	cost + 10% (\$500 min.)
Greater than 4"	*	N/A (d)

Notes:

- (a) = Town of Berryville to furnish and install wet taps to existing mains at cost plus 10%. Contractor to furnish and install lines and vaults.
- (b) = Town of Berryville to install meters.
- (c) = Town of Berryville to provide 2" service line to property line with 2" ball valve at cost plus 10%. Contractor to furnish and install meter vault and meter setter.
- (d) = Installed by contractor if larger than 4" required.
- * = Inspection fee applies, see Section V.

V. INSPECTIONS

A. Sanitary Sewer Camera Service & Storm Sewer Camera Service

Mains and Laterals Over 4-Inches in Diameter:

Mobilization Fee	\$250
Camera Fee	\$2.50 per linear foot

4-Inch Laterals:

Laterals Under 50-Feet in Length	\$100
Laterals 50-Feet in Length or Greater	\$100 plus \$2.50 per linear foot

B. Inspections

Approved Inspector or Town Staff.....	\$ 50 per hour
Licensed Professional Engineer	cost

Notes:

Cleaning lines will be required prior to camera use and is the responsibility of the applicant.

VI. SIGNIFICANT INDUSTRIAL USER FEES

Sewer system discharge permit	\$500
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VII. WATER METER TESTING

5/8" meter	\$ 100
All other meters	\$ 100 + cost

Notes: Fee is refunded if meter is found to be over registering

VIII. UNAUTHORIZED USE OF SERVICE

For unapproved water withdrawals from fire hydrants or any other part of the Town Water System, or when a customer willfully takes steps to reactivate service after service has been disconnected by the town on account of nonpayment of any charge owed to the town and the town is required to take some action to again discontinue service, such as removing the meter, etc., a charge for unauthorized use of service in the amount of two hundred and fifty dollars (\$250) shall be paid. This charge shall be in addition to any other charge for water and sewer utility services owed to the town, as well as any other legal remedies which the town may be able to pursue for unauthorized use of service.

Attachment 2

Keith Dalton

From: Keith Dalton
Sent: Monday, April 17, 2017 9:26 AM
To: Patricia Dickinson (Mayor)
Cc: Desi Moreland; Christy Dunkle; Rick Boor; Dave Tyrrell; Ann Phillips; Debbie Boggs
Subject: RE: AquaHawk

Pat:

You could stand up a system to read the radio read meters (not the touch read meters) in our system.

To do so, we would have to complete a propagation study and install the necessary number of gateways (likely 2 from what I gather). We would work with Southern, HD Supply, and VIRASEC to get everything in place for the meters, via the gateway(s), to communicate with a server. At that point we would integrate a customer portal like AquaHawk.

I do not have a grasp of costs but I understand that a gateway will likely run us in the ballpark of \$20,000 to \$30,000 depending on where it is installed.

If the Council wants to study this in more detail, then I would suggest that we schedule a time for someone from HD supply to run through this with them.

Take care,

Keith

Keith R. Dalton, Town Manager
Town of Berryville, Virginia
101 Chalmers Court, Suite A
Berryville, VA 22611

V 540.955.1099
F 540.955.4524

From: Patricia Dickinson (Mayor)
Sent: Friday, April 14, 2017 3:37 PM
To: Keith Dalton <townmanager@berryvilleva.gov>
Subject: RE: AquaHawk

I am not sure, did you mean that aquahawk work on some of our meters, but not all?

Patricia Dickinson
Mayor, Berryville Virginia
101 Chalmers Court, Suite A
Berryville, VA 22611
540 955 1099
www.berryvilleva.gov

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From: Keith Dalton
Sent: Friday, April 14, 2017 11:53 AM
To: Keith Dalton
Cc: Desi Moreland; Christy Dunkle; Rick Boor; Dave Tyrrell
Subject: AquaHawk

TC:

Some weeks ago, Pat provided me with some information on a customer portal solution for water utilities called AquaHawk (packet attached). Pat wanted me to look at this system in the hope that such a system will provide better information to the Town's utility customers.

I am sorry it has taken a while to make my way to spending a few minutes on this.

This morning I took a look at the information. This application (and other similar applications) work in systems that utilize Advanced Metering Infrastructure or Automated Meter Reading. At present, we do not have that that infrastructure in place. In other words, we do not have the system in place on which an application such as AquaHawk operates.

I called HD Supply (provide our meters and readers) and spoke to Mr. Tran about what it would take to get where you want to go.

The radio read meters are the first building block in this system. The first step in the process would be to replace our touch read meters with radio read meters. At that point we would have some choices. We could stay with our reading by walking the system (which I do not recommend), utilize a drive by system, or go to a system in which meters are communicating with a server (either ours or one that someone hosts). In the last system, a gateway (or gateways) would have to be constructed. These gateways will collect the data from the meters and transmit it to the server. A propagation study would have to be completed to determine the number and location of the gateways. Once the radio read meters are in place and the gateways are installed, then the Town will be collecting real-time meter information.

When we are receiving real-time data we will be able to utilize a customer portal like AquaHawk.

As you know, most recently I have spoken about the need to look at some large meters (or replacement). After that, we need to begin work to replace our older residential meters. Those older residential meters are the touch reads and they would be replaced with radio reads. The question would be how aggressive the Council wanted to be on this replacement. My thinking has been that we will want to replace our meters over the next decade. The pace of that program will of course drive the train on other projects such as utilization of a customer portal of this nature.

Let me know your thoughts.

Take care,

Keith

Keith R. Dalton, Town Manager
Town of Berryville, Virginia
101 Chalmers Court, Suite A
Berryville, VA 22611

V 540.955.1099
F 540.955.4524



AquaHawk™

DATASHEET

A Customer Portal Solution for Water Utilities

Engage Customers and Improve Client Satisfaction

AquaHawk™ is a Web-based, customer portal solution for municipal water utilities that use fixed base Advanced Metering Infrastructure (AMI) or Automated Meter Reading (AMR) systems. AquaHawk is a powerful customer service and water efficiency application that your organization can use to create a better client experience.

Engaging customers has never been easier! By providing valuable information and useful capabilities online, you can encourage customers to answer their own questions and minimize routine calls to your customer service team. Many utilities are using AquaHawk to resolve high bill complaints and reduce leak forgiveness expenses.

Your utility can build stronger relationships with customers by communicating proactively and in the communications channel they prefer.

Water Utility Benefits

Our utility clients are always excited about the positive customer feedback they receive after implementing AquaHawk. The solution offers measurable public relations value and can transform the standard water provider-customer relationship from "they just send me a bill every month" to "my provider cares and helps me manage my water costs."

AquaHawk simplifies the leak detection and notification process by accurately flagging and prioritizing problems, and pulling together customer information that is normally siloed in other applications.

It provides a supportive workflow process so customer service staff can efficiently

notify consumers and track who has been contacted. The application is a tremendous time-saver for utility staff.

For utilities with specific water conservation goals, AquaHawk helps identify inefficient users, who may require individualized assistance. After accounts have participated in conservation programs, providers can monitor response and track results.

Customer Benefits

AquaHawk is helping water utilities improve customer satisfaction. Here's a comment from an end-user:

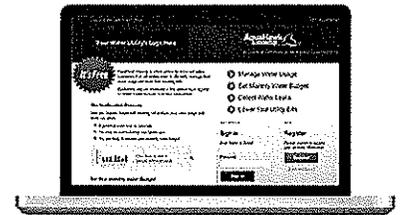
"First let me say, I love this portal and thank you for notifying us. What a great service. We identified a leak by 8am that morning."

AquaHawk offers tools so customers can understand how they're using water, learn how to be more efficient, and ultimately save money.

The solution offers peace of mind that demand-side leaks won't run unnoticed for hours or days, and can prevent costly property damage.

AquaHawk was designed to present high value information, in an intuitive, easy-to-understand format. Users of all technical abilities find the application simple to operate.

Customers can specify how they want to be contacted—text, e-mail, phone, direct mail—and can communicate from within the portal back to their provider.



Highlights

- **Affordably priced**
- **Intuitive and easy-to-use**
- **Simplifies the leak detection & notification process**
- **Makes responding to customer inquiries easier**
- **Saves staff members time and effort**
- **Reduces call center traffic**
- **Helps resolve high bill complaints**
- **Reduces leak forgiveness expenses**
- **Cloud-based - utilities don't need to purchase or install hardware or software**
- **Positive public relations value**
- **Fast implementation**

Intelligent Customer Portal Solutions for Water Utilities



A Customer Portal Solution for Water Utilities

DATASHEET

See a Demonstration Today!

To understand the valuable benefits of this user-friendly customer portal solution, call or e-mail us and schedule a live demonstration. It only takes 30 mins. Learn what a positive difference AquaHawk can make for your organization. Your customers will thank you!

Features & Benefits**Highly Secure & Scalable Cloud Hosting**

AquaHawk is hosted at one of the premier cloud-based hosting service providers in the world. Each data center has multiple layers of operational and physical security to ensure the integrity and safety of your data.

Backups are automated and geographically diverse replication prevents data loss in the event of a hardware failure, network disruption, or large scale power outage.

In addition to being highly secure, AquaHawk uses a database noted for speed, fault tolerance, and high performance.

Advanced Leak Detection & Notification

AquaHawk analyzes water consumption data to detect leaks, tampering, watering restriction violations, and more. Proactively communicating critical information to customers enables them to prevent costly water damage that can result when small leaks run undetected. AquaHawk enables customers to stay informed when they're away from their homes.

Multiple Alert Options

Customers can choose how they want to be contacted. AquaHawk can alert via: e-mail, text, phone, Web, and direct mail.

Intuitive and Easy-to-Use

Customers want access to their water consumption and billing information online but the system better be easy-to-use and immediately understandable.

AquaHawk provides actionable information, in an intuitive format...not just data. Your customers will enjoy using the system and staff members require minimal training.

Powerful Graphing Capabilities

Customers can view their consumption in a variety of user-friendly graphs. They can

Landscape Watering Guidance

AquaHawk is the only customer portal that combines landscape area, weather, rainfall, and consumption data to determine when an account may be overwatering. The system promotes irrigation efficiency and reduces wasted water.

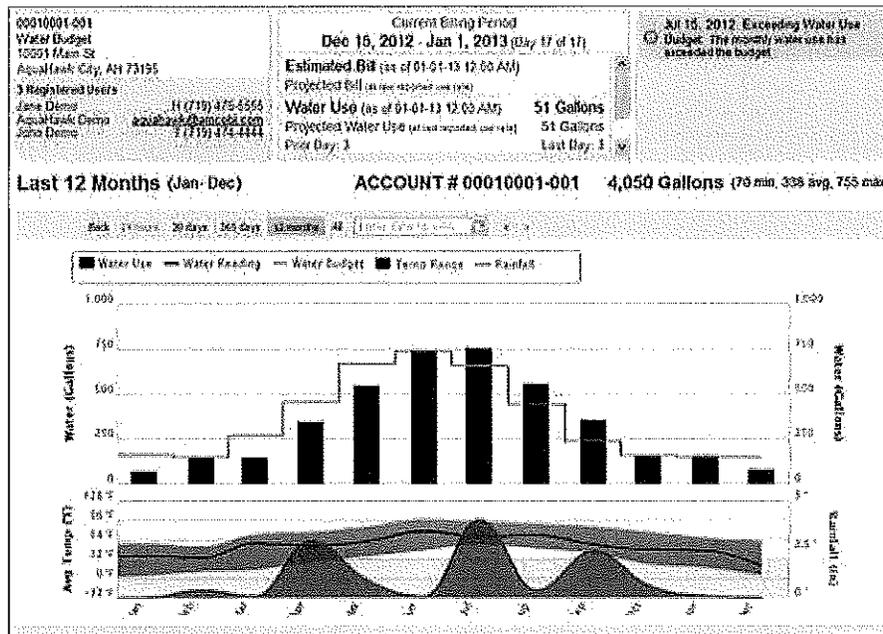
Estimated Bill-to-Date

Your rate tiers can be incorporated into the application enabling customers to login, anytime during the billing cycle, and see

a price for the water they've used, and an estimate of their final bill.

Threshold Alerting

If you've ever received a call from an angry customer about a high bill, you understand the benefits of Threshold Alerting. Customers can prevent large water bills by setting an amount of money (\$) or water (gallons) they don't want to surpass each month. AquaHawk monitors their consumption and sends an alert if they exceed the threshold.

**Mobile Device Support**

Customers can view consumption, billing, and leak information via a mobile Web browser.



P.O. Box 51356
Colorado Springs, CO 80949
Toll Free: (877) 410-0167 x1
Phone: (719) 532-0167
Fax: (719) 599-4057
E-mail: Sales@AmCoBi.com

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see how their current usage compares to: historical time periods, similar accounts ("Neighbors"), weather data, and more. Customers can see visually how their consumption compares to different price tiers, water budgets, or other allocations.

A Vendor-Neutral Solution

Our solution is platform independent and works with Silver Spring Networks, Sensus FlexNet™, Aclara STAR® Network, KP Electronics Mega-Net, Itron ChoiceConnect™, Neptune R450™ and R900®, Badger GALAXY®/ORION, ZENNER, Datamatic MOSAIC™ and more.

Intelligent Customer Portal Solutions for Water Utilities

A Customer Portal Solution for Water Utilities

AquaHawk is the **most widely used consumer engagement solution in the water utility marketplace**. We currently work with more than 46 utilities. We record, analyze, and present hourly consumption data for nearly 430,000 accounts.

The application is affordable, user-friendly, and will help your utility improve customer service and operate more efficiently. Advanced leak detection and notification ([/overview/advanced-leak-detection-notification](#)) capabilities empower water providers to quickly identify abnormal usage patterns, and then proactively communicate with customers via text message, e-mail, automated phone call, or direct mail. By offering customers access to their billing and usage data, they'll have the information they need to use water more efficiently and save money.

Engage Customers and Reduce Support Calls

AquaHawk offers a variety of customer self-service options that are available 24 hours a day. Providing useful information enables clients to answer their own questions and reduces customer service calls.

Easily Resolve High Bill Issues

AquaHawk makes it simpler and more efficient to manage high bill complaints because customer service staff can see the same consumption information that customers see. Employees can show customers when they may be using water unknowingly, simultaneously addressing their billing concerns.

Prevent High Bill Complaints

Threshold alerts help utilities prevent complaint calls that are caused when customers receive unexpectedly high bills. Users can set an amount of money (\$) or an amount of water (gals.) they don't want to exceed, and be automatically notified when they are trending to, or surpass those values.

Customers also use this capability to monitor for unauthorized water consumption when they are traveling or are away from their homes.

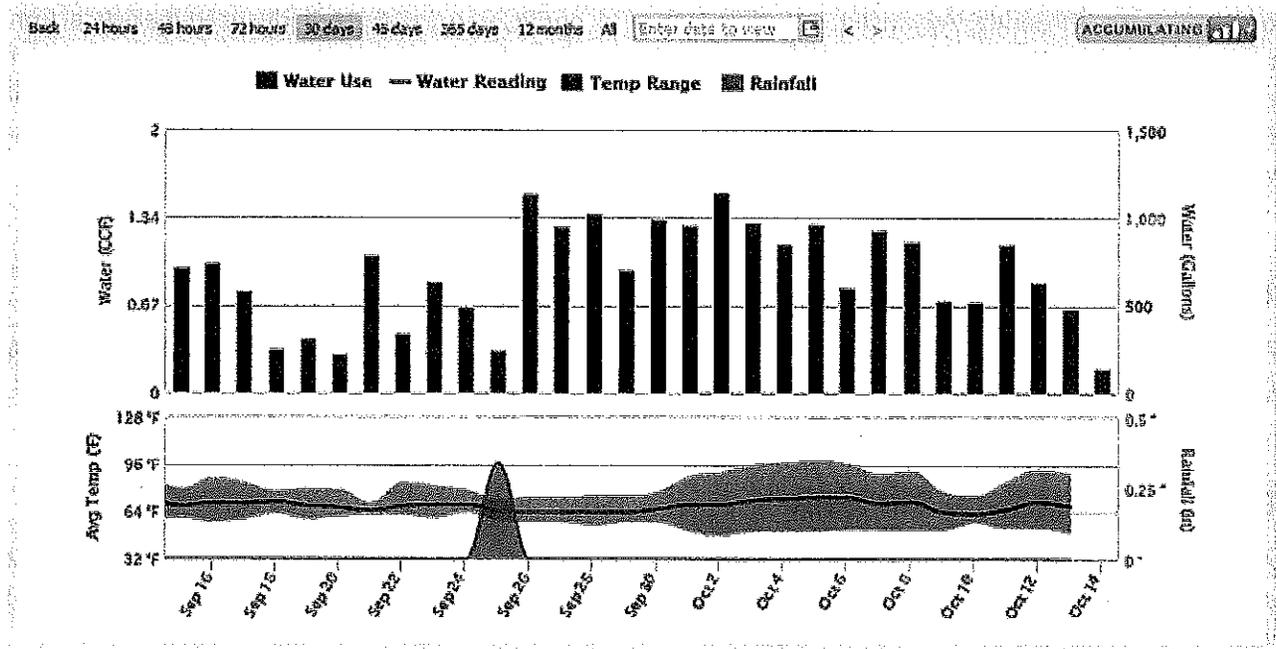
Proactively Notify Customers about Potential Leaks

AquaHawk offers the most accurate, reliable leak detection ([/overview/advanced-leak-detection-notification](#)) system available. When combined with an alerting system that includes text, e-mail, phone, and direct mail notification, water agencies can help their customers avoid costly and unnecessary water usage, as well as prevent property damage.

Water Electric Natural Gas 07-72 JOSE 2112 f SAN f Email Address Phone 1 Registered Users Joseph isy@yahoo.com	Current Billing Period Aug 15, 2014 - Oct 15, 2014 (Day 61 of 60) Estimated Bill (as of 10-14-14 8:00 AM) \$305.70 Projected Bill (at last reported use rate) \$312.05 Water Use (as of 10-14-14 8:00 AM) 41.8k Gallons Projected Water Use (at last reported use rate) 42.4k Gallons Last 24 Hours: 471 Last Day: 142 Meter Read: 165,887 Pay Online Export Alert Settings	Oct 10, 2014 Water Threshold: Water use exceeding a user defined threshold. Oct 7, 2014 Water Threshold: Water use exceeding a user defined threshold. Sep 27, 2014 Water Threshold: Water use exceeding a user defined threshold. Sep 26, 2014 Water Use: Abnormal water use detected. Sep 11, 2014 Water Threshold: Water use exceeding a user defined threshold.
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Register ID 60778 RADIO # 191

Last 30 Days (Mon Sep 15, 2014 1:00 AM - Tue Oct 14, 2014 1:00 AM) 20.6k Gallons (142 min, 686 avg, 1,145 max)



Encourage Water Efficiency

AquaHawk is a powerful water conservation and efficiency tool. It offers:

- Comparisons to similar users that reveal how an account can use water more efficiently
- Water budget and conservation target graphs (i.e., use 12,000 gals. per month or reduce usage by 25%) that show customers graphically how they're doing against a budget, ordinance limit or savings goal
- A process for managing daily water restrictions (i.e., customers with even addresses can only irrigate on Tuesdays and Thursdays)
- Landscape watering guidance. Combines landscape area, weather, rainfall, and consumption data to determine when an account may be overwatering.

Mobile Device Access

Access your water usage information from a smartphone, iPad, or other mobile device. AquaHawk offers a mobile browser-friendly view of key data and existing alerts.

Non-Revenue Water Tracking

Reporting capabilities in the application will monitor non-revenue water (NRW) losses by analyzing the amount of water supplied to a utility's system, what was stored, uncategorized usage, as well as demand-side sales. Staff can track NRW losses by day, week, month or other time period.

Promote Online Payment & Paperless Billing Services

If your utility offers online payment or paperless billing services, buttons within the AquaHawk portal can be linked to those sites, encouraging customers to use them. Single sign-on integration can be enabled so users don't have to login multiple times.

If you don't have an online payment or paperless billing (/overview/online-bill-presentment) provider and need one, please contact us (/contact-us/b2jcontact?bid=1).

Committed to Information Security

We are committed to delivering the highest standards of information security through our internal policies and external systems. We actively protect the privacy and confidentiality of your customers.

We use a reputable, high quality, cloud-based hosting provider that offers multiple layers of operational and physical security so you can be sure your data is safe and protected. Backups are automated and geographically diverse replication prevents any data loss in the event of a hardware failure, network disruption, or large scale power outage.

Turn "Big Data" into Actionable Information

Even small utilities (5,000 connections) can generate millions of reads every year (43,200,000 reads at 1 hr. intervals). That's a huge amount of data that needs to be analyzed, interpreted, and prioritized. AquaHawk turns large datasets into actionable information that utility staff members, and your consumers, can understand and use.

Export Usage Data

For customers interested in analyzing their own consumption data (e.g. with Microsoft Excel), an integrated data export feature enables users to create a .CSV file with hourly, daily, or monthly values, for all of their accounts.

AquaHawk Datasheet

Download a product datasheet by clicking the link below.



AquaHawk Datasheet (PDF)
(<http://get.adobe.com/reader/>) (/images/pdfs/AquaHawk_Datasheet_161018_with-UH-logo.pdf)

See an Online Demonstration

To see a video of AquaHawk capabilities for **utility customers**, click here (<https://www.youtube.com/watch?v=xBnSSbEPqXQ>).

To see a video of AquaHawk capabilities for **utility employees**, click here (<https://www.youtube.com/watch?v=sRdMCRdpdYo>).

For a live online demonstration, contact us (</contact-us/b2jcontact?bid=1>) today.