BOLINAS COMMUNITY PUBLIC UTILITY DISTRICT
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MEMORANDUM

TO:	Board of Directors
FROM:	Georgia Woods, General Manager
RE:	***Item 14.*** *Status Update on the Automated Meter Pilot*
DATE:	October 21, 2026

Purpose

To provide the Board with an update on implementation of the Automated Meter Pilot and summarize progress made since the September update.

Project Status

Since the Board's September 16 update, staff has continued working to improve network coverage and optimize system performance throughout the pilot area.

The primary challenge encountered during this phase of the project has not been with the meters themselves, but rather delays in receiving compatible meter box lids from Core & Main. These lids are necessary to optimize the performance of the wired communication pins used by the automated meter reading system. Staff has been awaiting delivery of these components for several months and anticipates that communication reliability will improve further once the remaining lids are installed.

Network Expansion Efforts

Improving network coverage remains a key focus of the pilot. Bridge devices are being strategically deployed throughout the community to improve communication pathways and assist meters that may otherwise have difficulty reaching the network.

Staff greatly appreciates the willingness of community members and Board members to host and activate these devices. Community participation has been instrumental in helping the District evaluate system performance under real-world conditions and improve overall network coverage.

Staff also encourages customers who utilize Ring devices to consider enabling the "Sidewalk" feature. Doing so may improve communication pathways for compatible devices and strengthen overall network connectivity.

Preliminary Observations

While staff is not yet prepared to draw firm conclusions regarding overall system performance, several observations are beginning to emerge.

As of October 20, 2026:

- Approximately **68%** of devices are communicating efficiently and providing daily meter reads.
- Approximately **16%** of devices are communicating irregularly, generally every 2-5 days.
- Approximately **15%** of devices are not currently communicating automatically.

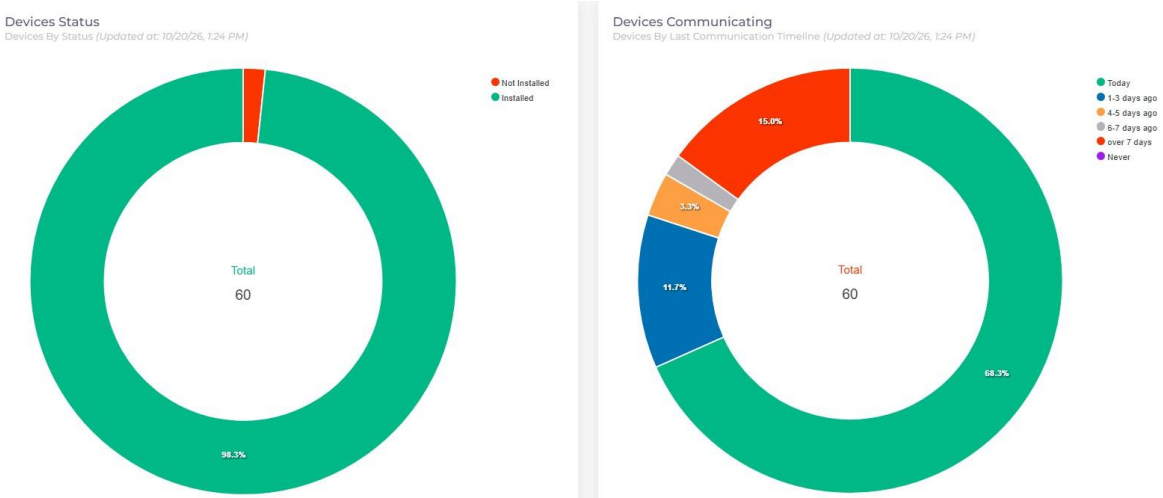


Figure 1. As of October 20, 2026, we still had one Kamstrup meter and associated wired pin that need to be installed (chart on left). Of the 59 installed readers, 68% of meters were transmitting data efficiently (daily); 15% of devices are transmitting data irregularly (every 2-5 days) and 15% are not transmitting data automatically.

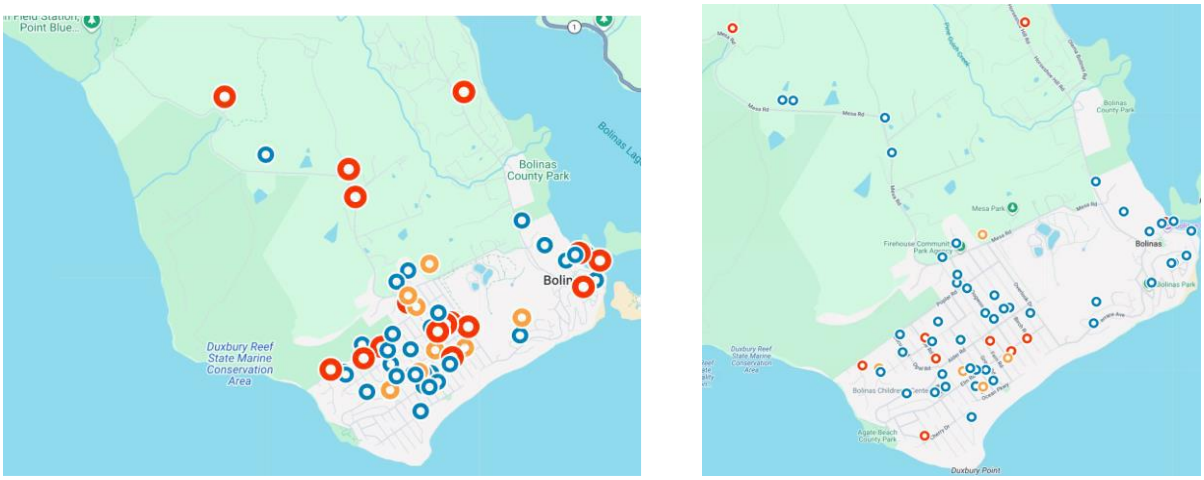


Figure 2. Automated Network Coverage Map presented to the Board at its last meeting on September 16, 2026 (map on left). Network Coverage Map from October 20, 2026, after additional bridge devices deployed, and further efforts to optimize the network (map on the right). Red dots are meters that were/are not readily communicating in an automated fashion; orange indicates one irregularly communicating (every 2-5 days); and blue dots indicate those communicating daily.

Because several obvious improvements are still outstanding, including installation of compatible lids and replacement of certain metal lids, staff believes the current results likely understate the system's ultimate performance.

Based on discussions with vendors and other utilities utilizing similar technologies, staff currently believes it may be reasonable to assume that approximately 10% of devices may require periodic manual follow-up even under optimized operating conditions. Applied across BCPUD's approximately 600 active meters, this would equate to roughly 60 meters requiring manual data collection.

To better understand the operational implications of this scenario, staff conducted a test work order to estimate the time required to collect data from non-communicating meters using a drive-by approach. Preliminary results suggest that collecting the remaining 10% (~60 meters) of meter data each month would require approximately **two hours of additional field labor**.

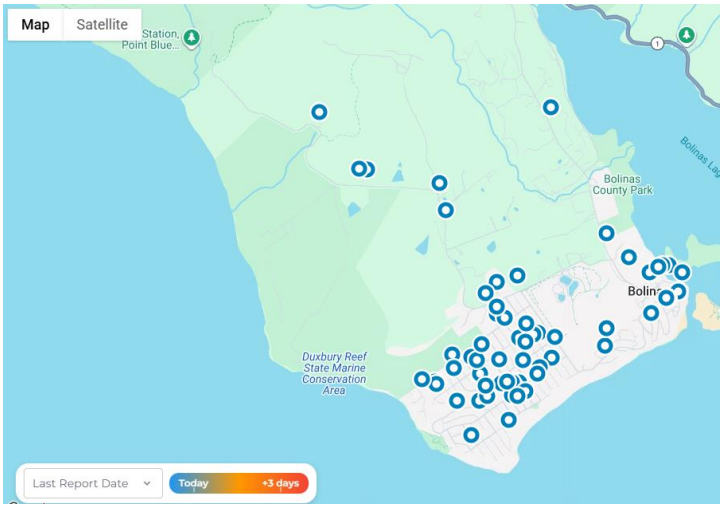


Figure 3. The blue dots indicated in the map above show meters after field staff conducted a "drive-by" meter read, that took ~2 hours to complete.

This should ultimately be compared against the time currently required to manually read and process meter data under the District's existing staggered reading system.

The key question for staff is not whether every meter communicates perfectly, but whether the automated system substantially reduces labor requirements while simultaneously providing more frequent and higher-quality consumption data.

Next Steps

Over the next month, staff intends to:

- Install compatible meter box lids as they become available.
- Complete installation of the final pilot meter.
- Deploy additional bridge devices and other network hardware.
- Continue optimizing network coverage and communication pathways.
- Collect additional operational data under more fully optimized conditions.
- Evaluate communication performance, data quality, and day-to-day network stability.
- Estimate administrative and field labor associated with monitoring meter data, reporting, leak detection, and preparing future non-staggered billing.
- Continue comparing the labor required to collect data from non-communicating devices against the labor associated with manually reading the District's full meter inventory.
- Evaluate the percentage of meters capable of communicating hourly and assess the potential value of future customer-facing data portals and leak detection tools, so that customers can monitor consumption and identify potential leaks.

Staff anticipates returning to the Board in November with a more comprehensive update once the remaining network improvements have been implemented and reliable data can be collected under more optimized conditions. At that time, staff expects to provide a more meaningful assessment of network performance, communication reliability, data quality, labor savings, and overall operational benefits in order to inform a future decision regarding potential districtwide deployment in Fiscal Year 2027/28.

Recommended Board Action

Receive update. No action requested.