

Powder Mountain Water and Sewer Improvement District

BUILDING TO SERVICE EXCELLENCE: A FOLLOW-UP REPORT TO OUR CUSTOMERS

Prepared by the PMWSID Board of Trustees and District Management — September 23, 2026

Following the August 2026 boil order associated with the Bloomington Well, the District has received questions from a number of residents that would be best answered through a comprehensive a follow-up analysis.

This report serves as an initial record of the work the new Board and District management have undertaken to improve service reliability, control costs, increase transparency, and ensure public funds are spent effectively, without in any way sacrificing quality of water or sewer service. Our purpose here is to be forthright about the condition in which many of the District's systems, records, and practices were found, and the corrective action we continue to take on behalf of our customers.

The Bloomington Well Water Quality Event

What Happened

On Monday, August 31, 2026, PMWSID conducted its regularly scheduled water quality sampling in accordance with the sampling schedule approved by the Utah Division of Drinking Water (DDW). Historically, this sampling has been conducted at or near the end of each month. Samples were collected and delivered to Weber Basin Water Conservancy District for analysis of total coliform (TC) and E. coli (EC).¹

Based on the results of this testing, and following additional coordination and resampling with DDW, the District worked with DDW to issue the boil order.

District Response

Through resampling and further investigation with DDW, the District determined that the Bloomington Well was the source of the E. coli contamination.

Public Notice was completed and flushing and disinfection of the system were already underway and nearly complete before the DDW's notification deadline was reached – going far beyond the state's minimum requirements, despite occurring on a holiday weekend.

Over the following two weeks, the District flushed all disinfectant from the system so that additional samples could be collected and provided to DDW showing that all contaminants and disinfectants had both been removed from the system. The District and DDW officially lifted the boil order on September 17, 2026.

¹ With the new staff in-place, more frequent testing protocols were being developed prior to the current event and will now be conducted weekly, much more than DDW's requirements.

The District has engaged local well cleaners to have Both Bloomington Well and Hidden Lake Well cleaned and disinfected. Once Bloomington Well is cleaned and showing acceptable samples, the District will turn it back into the system.

Root Cause

District management and staff investigated the Bloomington wellhead and the conduit box; both were found to be in good condition and unlikely contributors to the contamination. Continuing immediately downstream, the investigation identified an air valve manhole as the likely point of entry of contamination. Air valves serve to release air from the system (preventing vapor lock) and to admit air when needed (preventing pipe collapse under negative pressure). DDW and District standards require air valves to be plumbed so they vent above grade, with a specified air gap between the ground and the bottom of the pipe.

Original construction / engineering plans confirm that the Bloomington air valve was designed to meet DDW and District standards. However, it was constructed, installed, and accepted into the District's system by the staff at that time even though the completed installation did not meet those requirements. This occurred around July of 2024.

As installed, the valve is not plumbed to vent above grade and is instead open to the environment at the bottom of the manhole. The District and DDW have determined that the most probable cause of contamination was stormwater flooding the manhole and introducing contaminated water into the vent of the air valve.



The Bloomington Well air valve, as found: not plumbed above grade and open to the manhole environment.

The District is currently working with contractors to correct the air valve and bring it into compliance with District and DDW requirements before the well is accepted for full ownership and dedication to the District.

The recent incident most likely arose due to heavy rains occurring in August 2026 (one of the rainiest Augusts of the last decade—more than 4x historical rates).² As designed, the rains we experienced would *not* have been an issue, but as installed the rains exposed the inadequacy of the air-valve installation.

Resolution

After flushing and disinfection of the system was complete, the District conducted extensive water quality sampling throughout the system to ensure that all disinfectants and contaminants had been removed from the system. Once DDW water quality sampling requirements were achieved, the District and DDW officially lifted the boil order on September 17, 2026.

As a result of this event, our new District Manager has commenced an overview inspection and audit of all District infrastructure to proactively seek to ensure that similar issues do not exist. Some additional preventative maintenance and upgrading to valves, pumps and similar infrastructure components is already underway. While we cannot prevent every condition, rest assured, this is a priority and part of the recent overhaul of the operational structure and oversight.

Addressing Specific Questions from the Community About The Boil Notice

We have never received a boil order before – is this related to the change in District management or operations?

PMWSID *has* issued boil orders in past years, including one last year. What the current Board and management find more notable is that many residents were unaware those earlier boil orders had occurred — indicating that public notification practices in the past were not effective, adequate or transparent.

For the August 2026 event, the District notified the public promptly and through multiple channels – email, text, and posting to the website. The Board and management were directly and actively involved in ensuring that members of the community were informed in a timely manner. Please also note that in the next 30 days, a more streamlined App-based notification system will be rolled for real-time notifications regarding systems updates or emergencies. The App will also enable easier access to billings and the Waterscope program—a communication on how to access and utilize the App will be forthcoming.

Is increased water use for construction and snowmaking overtaxing District wells and drawing in contaminants?

Total demand on the District’s wells remain well below their state-approved safe-yield capacity. The Bloomington and Hidden Lake wells have a combined safe yield of approximately 234 gallons per minute, or roughly 688 equivalent residential units (ERUs) of capacity. Only about 177 ERUs are currently connected to the system, leaving more than 250,000 gallons per day of available source capacity. Construction water use typically totals 40,000 to 45,000 gallons per day. The system continues to operate well within its designed capacity and guardrails are in place to ensure this remains the case with these non-culinary demands.

² A CoCoRaHS observer in Eden (station UT-WB-7, Eden 0.3 W) recorded 3.30 inches for August. The 1991–2020 NOAA normal for that location is about 0.83 inches (PRISM estimate ~0.94 inches). That is roughly four times a typical August.

In fact, current District management has **reduced** operational strain on the Hidden Lake Well.

In the past, Hidden Lake and Bloomington wells operated on separate control systems, entirely independent of one another, so Bloomington well had been operated by manually turning the well on or off—exposing operations to human error. On multiple occasions, the then in-place staff inadvertently left the well running, wasting water and overflowing the storage tank all night long. As a result, Hidden Lake Well carried nearly all of the system’s demand while Bloomington ran only occasionally when the then in-place operators remembered to turn it on.

We have corrected this approach - both wells are now integrated onto a single SCADA platform, allowing them to alternate automatically and share the demand load.

Progress with Recent Changes to Management/Operations

Bloomington Well Agreement and Technical Collaboration with Powder Mountain Resort

The District’s technical collaboration with Powder Mountain (the Resort) — a major District customer and, more recently, the District’s contracted operator — is a major priority and focus of attention.

For example, thanks to the latest iteration of the Bloomington Well Agreement between the District and the resort, the District will no longer be allocating water it does not possess. The agreement will resolve that deficiency and is projected to save ratepayers millions of dollars in capital costs.

The operational contract for certain services between the District and the Resort has also enabled closer collaboration on infrastructure projects, including a joint effort now underway to inspect every manhole and vault containing District infrastructure — prompted directly by the air valve finding described above — to identify any other locations that were accepted as District infrastructure without meeting DDW or District standards. With the Resort’s support, the District expects to complete this inspection within the next two weeks.

An effort of this scope likely would have taken months before the District embraced this new operating model, because it is now far easier and more cost-effective to flex to incorporate fractional resources and equipment on an on-demand basis.

Records and Documentation

District records were not maintained in a consistent, centralized system. Record drawings, as just one example, lacked a consistent storage location or even a consistent file-naming convention. Many documents were never saved to the District’s server, making specific records difficult or impossible to locate. One of the new District staff’s early priorities was implementing a consistent file hierarchy and naming system; the District is now working to migrate historical files into this structure.

Financial Stewardship

The draft 2027 budgeting shows an anticipated \$750,000 to \$1,000,000 in annual operational savings compared to the 2026 budget. Roughly one-third of this reduction is attributable to the new operating agreement with the

Resort the Board secured; the remaining two-thirds reflects more deliberate, targeted budgeting and spending practices by the Board and current District management.

It is true that this recent incident gave rise to certain concerns about whether these proposed savings were realistic – however, the analysis continues show these savings are achievable. What is remarkable is that yearly increases in budgeted amounts for maintenance, which are a major driver of the cost of rates, were not accompanied with best practices in maintenance execution (see the list of Maintenance Actions in the tables below).

In fact - the reduction in overall operating expenses does not reflect reduced investment in maintenance. The District has budgeted and intends to spend **more** on maintenance and repairs in 2027 than in prior years, while simultaneously reducing the Districts total annual operating budget. The tables below show budget-versus-actual spending on water and sewer repairs and maintenance for 2024–2026, alongside the proposed 2027 budget.

Unlike in past years, when a large share of the maintenance budget went unspent even as the budgeted amount continued to grow, the 2027 budget allocates specific line items intended to be spent in full — so these funds go toward their intended purpose rather than serving as a “slush fund” to offset overages elsewhere in the budget. The District staff and Board are focused on proper stewardship of the District’s infrastructure and will be implementing routine inspections and maintenance.

Water Repairs & Maintenance

Year	Actual Spent	Budgeted	% of Budget Spent
2024	\$29,318.57	\$45,000.00	65%
2025	\$51,416.37	\$88,120.00	58%
2026	\$65,844.49*	\$156,843.00	42%*
2027	—	\$75,000.00	—

The 2026 actual figure is a forecast that includes specific maintenance items expected to be completed by year-end; some costs are estimates, and actual totals may vary. Prior to the change in District management the Board was able to put in place on June 1, 2026, only \$3,273.91 had been spent for the year, and it is not clear how — or whether — the remaining budgeted amount was intended to be used.

Sewer Repairs & Maintenance

Year	Actual Spent	Budgeted	% of Budget Spent
2024	\$21,009.57	\$95,000.00	22%
2025	\$52,617.49	\$172,084.00	31%
2026	\$125,659.53*	\$260,000.00	48%*
2027	—	\$110,250.00	—

As with the water table above, the 2026 figure is a forecast reflecting planned year-end completions and may vary. Prior to the June 1, 2026 change in District management, only \$2,825.00 had been spent for the year, and the basis for the remaining budgeted amount is unclear.

It is unclear why year-over-year maintenance budgets continued to increase substantially even as actual spending consistently fell well short of the budgeted amount. Viewed across full fiscal years, this pattern allowed maintenance and repair funds — among the District’s most important expenditures — to function as a general reserve for overages elsewhere in the budget, rather than being directed to their intended purpose.

The current Board and management have committed to be targeted, transparent, and accountable with spending, especially in these categories, without any sacrifice to quality of service.

Operations and Maintenance Actions

Under the current board and management, the following bullet points outline a few of the other important improvements and changes that have been or are being implemented to the operation system.

- Increased water quality sampling from two locations per month (the DDW minimum, and what was previously conducted) to anywhere from four to six locations per week – including weekly sampling of active sources.
- Purchased rebuild kits for the top-of-mountain booster pumps — critical, near-continuously running equipment for which the District previously had no spare pump or rebuild kit on hand. A failure could have significantly disrupted service for an extended period, potentially two to three weeks or more.
- Established an annual maintenance program for the District’s pressure-reducing valves (PRVs), including cleaning, inspection, and verification of settings — replacing a previously reactive, as-needed approach.
- Established annual inspections of the entire sewer system to continually identify major contributors to I&I.
- Implementing system wide sewer metering.
- Implementing annual I&I mitigation projects.
- Implementing annual maintenance of the sewer treatment facilities.
- Improved, real-time monitoring of construction water usage to prioritize drinking water for culinary use.
- Implementing constant, remote monitoring of sewage treatment lagoons levels.
- Revising standards and specifications to adopt industry standard and proven technology, while simultaneously reducing overall construction costs.
- Revising the previously prepared Master Plans, CFPs, and IFFPs to reduce the scale and scope of proposed improvements to a more justified and targeted list of needed improvements– reducing costs to rate-payers.
- Immediate stocking of a minimum of 100 pounds of granulated chlorine on-site for emergency disinfection of the drinking water system or tanks; this had not previously been kept on hand.
- Developing formal standard operating procedures for system flushing, testing, cross-connection control, backflow preventor inspections, sand-oil separator maintenance/inspection, and procedures and schedules for maintaining and exercising valves, pumps, and generators, as well as other recurring maintenance/inspection items. These SOPs, schedules and plans had not previously been documented or performed methodically.
- Roll out of a new District mobile App and updated website to improve and expedite public notification capabilities.

- Established an ongoing service contract for maintenance of the District’s emergency generators, including biannual inspections and an annual two-hour load-bank test. These generators are essential to maintaining water and sewer service during power outages.
- Establishing a proactive and preventative maintenance program with digital log keeping of preventative activities – accompanied by the scoping of a system-wide one-time project to address unknown issues as well as deferred maintenance activities. The EPA’s asset-management guidance recommends linking asset condition and criticality to service expectations, life-cycle costs, and long-term funding. A best practice for the District is to maintain a single asset register and a corrective-action log identifying the responsible person, target date, risk priority, and evidence of completion. A regular exception report would highlight overdue high-risk work and unresolved defects. Implementation would be phased according to risk, available resources, and Board approval. The District is committed to transitioning from the previously reactive posture that caused systemic weakness into a posture of proactive effort, even as we reduce projected budgets.

Closing

The Board and District management remain committed to a new and refreshing level of transparency with our customers, sound stewardship of public funds, and continuous improvement of the District’s infrastructure and operations. We are also customers of the District and recognize that the recent service disruption has been frustrating. We also believe it is important for our customers to understand the full context behind these events and the substantial work already underway to strengthen the systems that serve our community.

A significant question to arise from this recent incident is whether permanent chlorination of the system will need to be implemented. The District will be assessing the cost/value proposition of any such plans, and will engage significantly with the DDW and the rate-paying community as it seeks to answer this question.

We welcome questions from District customers and are committed to keeping our community informed as this work continues.