



Henderson County Water District
Qualified Infrastructure Improvement Plan
PSC Case # 2023-00333

PSC Case No. 2023-00333

Date: April 30, 2026

Henderson County Water District submits this Qualified Infrastructure Improvement Plan (QIIP) Update in response to the Kentucky Public Service Commission's February 16, 2026 Order in Case No. 2025-00280, which directed the District, on or before May 1, 2026, to review its existing QIIP in light of the projects proposed in that case and file, in Case No. 2023-00333, either an updated QIIP or a detailed explanation of why an update is not necessary. This filing is intended to explain the continuation of the District's previously submitted water accountability strategy, identify changes to certain original line items, and clarify how the current project structure remains aligned with the District's original QIIP objectives.

Purpose of Update

The District's original QIIP, filed in Case No. 2023-00333, established a water loss reduction plan focused on reducing unaccounted-for water through distribution management areas (DMAs), improved data collection, leak detection, valve improvements, metering, SCADA enhancements, and related infrastructure investments. The original QIIP also recognized that the estimated surcharge proceeds would be insufficient to complete all needed system improvements and that additional funding would be necessary to fully implement the District's long-term water accountability goals.



Since submission of the original QIIP, Henderson County Water District has obtained outside project funding through the Henderson County Fiscal Court for certain water accountability improvements and has completed or advanced several purchases and planning activities that affect the original line-item structure. In the February 16, 2026 Order, the Commission found that the District’s corrective action plan was consistent with its QIIP, but directed the District to review and update the QIIP record in Case No. 2023-00333 so the docket would accurately reflect the current project structure and related planning.

Continuity With Original QIIP

This update does not change the District’s overall objective of reducing unaccounted-for water and improving system accountability. Instead, it refines several original line items based on equipment already purchased with outside funds, operational needs identified during implementation, and updated pricing while preserving the same overall water accountability framework described in the 2024 filing of the original QIIP.

The original QIIP described a phased strategy that included short-term, medium-range, and long-range actions, including the purchase of leak detection equipment, acquisition of sub-foot grade GPS equipment, installation of pump station soft starters, SCADA upgrades, installation of mag-flow and zone meters, valve improvements, and purchase of a towable hydro-vac. This update maintains those same core categories while revising selected descriptions to reflect present project conditions and sequencing.



Updated Project Cost Table

Estimated Project Cost/Changes		
Original Line Item	Updated Line Item	Cost
Leak Detection Equipment	ADDITIONAL Leak Detection Equipment	\$10,000.00
Sub-Foot grade GPS/accessories	(1) ADDITIONAL Sub-Foot grade GPS/accessories	\$12,000.00
Pump Station Soft Starter and Installation	Pump Station Soft Starter and Installation & additional two pumps for 41-A Pump Station	\$100,000.00
SCADA Upgrade	ADDITIONAL Mag-flow meters & Zone Meters	\$75,000.00
Mag-flow meters & zone meters	* No Changes to Line Item *	\$305,000.00
Valves and Installation	* No Changes to Line Item *	\$75,000.00
Towable Hydro-Vac	* No Changes to Line Item *	\$110,000.00
	Total	\$687,000.00

The original 2024 QIIP project cost table totaled \$687,000.00 and included the same seven general categories, with \$350,000.00 allocated to mag-flow meters and zone meters and \$65,000.00 allocated to the towable hydro-vac. This update preserves the same stated total project amount while reallocating certain amounts to reflect completed purchases, expanded equipment needs, and updated price assumptions.



Explanation of Updated Line Items

Leak Detection Equipment

The District purchased leak detection equipment using project funds received through the County Fiscal Court. Because those tools are already in service, the revised line item is directed toward additional leak detection equipment so that more staff can perform leak detection activities simultaneously and expand coverage across the distribution system. This revision remains consistent with the original QIIP, which identified acoustic listening devices and related leak-location tools as a key part of locating real water loss once a problem area is identified through DMAs, zone metering, and monitoring.

Sub-Foot Grade GPS/Accessories

The District has already purchased one sub-foot grade GPS unit and accessories using County Fiscal Court project funds. The updated line item requests one additional unit so both maintenance crews can capture accurate field attributes during routine operations, especially leak locations and related asset data, thereby improving the District's GIS map and long-term capital planning information. The original QIIP specifically tied high-resolution GPS capability to GIS-based asset management, leak tracking, repair documentation, and improved identification of infrastructure conditions across the system.



Pump Station Soft Starter and Installation

This line item remains in place to support soft starter installation at the 41-A, Rock Springs, Graham Hill, 41-S Anthoston, and 41-S Robards pump stations, which was part of the original short-term action plan. The updated description also includes two additional larger pumps for the 41-A Pump Station to help address aging infrastructure and improve operational reliability at that location while continuing the original objective of reducing system stress and improving pump station performance.

SCADA Upgrade / Additional Mag-Flow and Zone Meters

The District purchased the SCADA upgrade using County Fiscal Court project funds. As a result, the updated \$75,000.00 line item is redirected to additional mag-flow meters and zone & subzone meters to further subdivide the District's existing zone boundaries into more discrete DMA areas for monitoring and leak identification.

This revision is consistent with the original QIIP's emphasis on SCADA-enabled data analysis, zone metering, and DMA management. The original plan explained that SCADA data analysis, combined with full-pipe magnetic flow meters and cellular data transmission, would allow the District to observe system behavior in real time, identify abnormal flows, and locate water loss more efficiently.

Mag-Flow Meters and Zone Meters

There is no change in the underlying purpose of this line item, although the amount is adjusted to \$305,000.00 to account for the reassignment of a portion of the original metering-related work to the updated line item replacing the original SCADA upgrade category. These funds will continue to support initial zone metering, including meters,



meter pits, related materials, and integration with the District's existing SCADA platform so flows can be monitored throughout the system in real time.

The original QIIP identified zone meters as foundational to the creation of DMAs, validation of customer usage within each zone, and isolation of areas with real water loss.

Maintaining this line item is therefore necessary to continue implementation of the original water accountability framework.

Valves and Installation

There is no change to this line item. These funds will continue to be used to replace and/or add valves in the distribution system to support existing zones and additional DMA separation, which remains consistent with the original QIIP action plan calling for installation of isolation valves as part of DMA development.

The District is also retaining the word "installation" because some portion of this work may be completed by outside contractors depending on project location, complexity, and scheduling needs. This approach remains aligned with the original QIIP objective of creating hydraulically manageable and measurable service areas.

Towable Hydro-Vac

There is no change to the purpose of this line item other than an increase in cost based on current bids. These funds will be used to purchase a towable hydro-vac with an integrated valve exerciser and GPS capability for use in cleaning valve boxes, straightening valve boxes, locating mains for portable flow metering, assisting with line locates, and supporting other water loss-related field work.



The original QIIP identified non-destructive excavation and integrated valve exercising as important tools for reducing repair time, protecting fragile infrastructure, and improving field response to leaks and valve access needs. The updated pricing reflects current procurement conditions rather than a change in project purpose.

Relationship to Case No. 2025-00280

In its February 16, 2026 Order, the Commission determined that the proposed AMI project in Case No. 2025-00280 was an ordinary extension in the usual course of business and that a CPCN was not required. The Commission also determined that Henderson County Water District was not required to obtain prior Commission approval before entering into the grant agreement that supported the proposed project, but expressly stated that any use of surcharge funds must still be requested in Case No. 2023-00333 through the appropriate motions and requests before expenditure

This filing is intended to comply with the Commission’s directive to review the QIIP in light of the projects proposed in Case No. 2025-00280. Henderson County Water District respectfully states that the revisions described in this update do not alter the underlying purpose of the original QIIP, but instead clarify how certain original line items have evolved due to outside funding, completed purchases, equipment additions, and updated pricing while remaining consistent with the District’s overall water loss reduction strategy.



Request

Henderson County Water District respectfully requests that the Commission accept this QIIP Update for filing in Case No. 2023-00333 as the District's review of its Qualified Infrastructure Improvement Plan in light of the projects addressed in Case No. 2025-00280. The District further states that any request to expend surcharge funds will be made by separate motion or other appropriate filing in Case No. 2023-00333 before those funds are used, consistent with the Commission's prior directives.

Respectfully,

Mark Julian

Superintendent

Henderson County Water District