

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN ELECTRONIC INVESTIGATION INTO)	
MILBURN WATER DISTRICT TO DETERMINE)	
THE FEASIBILITY OF MERGER WITH A)	CASE NO.
PROXIMATE UTILITY PURSUANT TO KRS)	2021-00341
74.361 OR ABANDONMENT PURSUANT TO)	
KRS 278.020(6), KRS 278.021)	

NOTICE OF FILING OF FEASIBILITY STUDY

Notice is hereby given that, in accordance with the Commission's August 30, 2022 Order, the attached report containing the findings of Commission Staff regarding the feasibility of merger between Milburn Water District (Milburn District) and Graves County Water District (Graves District). Milburn District and Graves District are required to file written comments regarding the findings of Commission Staff no later than 14 days from the date of this report. The Commission directs Milburn District and Graves District to the Commission's July 22, 2021 Order in Case No. 2020-00085¹ regarding filings with the Commission.



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DATE MAY 31 2024

cc: Parties of Record

¹ Case No. 2020-00085, *Electronic Emergency Docket Related to the Novel Coronavirus COVID-19* (Ky. PSC July 22, 2021), Order (in which the Commission ordered that for case filings made on and after March 16, 2020, filers are NOT required to file the original physical copies of the filings required by 807 KAR 5:001, Section 8).

FEASIBILITY STUDY ON MERGER

BACKGROUND

On March 31, 2022, the Commission, on its own motion and pursuant to KRS 74.361, established this proceeding to conduct a formal investigation into Milburn Water District (Milburn District), and the feasibility of merger with a proximate utility, or in the alternative whether Milburn District has been effectively abandoned pursuant to KRS 278.020(6) and KRS 278.021. Case No. 2019-00041 was also incorporated by reference into this case.¹ During Case No. 2019-00041, the Commission ordered Milburn District to pursue merging with Graves County Water District (Graves District).² Milburn District did not file any response to the Order in the record of Case No. 2019-00041. In its final Order to Case No. 2019-00041³ the Commission ordered Milburn District to respond within ten days to its November 22, 2019 Order in that case and Milburn District did not respond.⁴ Milburn District's inability to maintain its regulatory requirements caused the Commission to question its ability to provide adequate and reasonable service that necessitated this investigation. On August 30, 2022, Graves District was made a party to the current proceeding.⁵ Commission Staff issued five separate data requests to

¹ Case No. 2021-0341, *An Electronic Investigation into Milburn Water District to Determine the Feasibility of Merger With a Proximate Utility Pursuant to KRS 74.361 or Abandonment Pursuant to KRS 278.020(6), KRS 278.021* (Ky. PSC. Mar. 31, 2022).

² Case No. 2019-00041, *Electronic Investigation into Excessive Water Loss by Kentucky's Jurisdictional Water Utilities* (Ky. PSC. Nov. 22, 2019), Appendix F at 22 of 106.

³ Case No. 2019-00041, July 30, 2021 final Order, ordering paragraph 4.

⁴ Case No. 2019-00041, July 30, 2021 final Order.

⁵ Case No. 2021-00341, Aug 30, 2022 Order.

Milburn District⁶ and two separate data requests to Graves District.⁷ Commission Staff also scheduled informal conferences (IC) for October 9, 2023,⁸ and February 6, 2024.⁹ Commission Staff met with two Milburn District contractors (accounting, certified operator) on November 29, 2022, to develop an understanding of Milburn District's operations. Commission Staff also met with Graves District representatives on November 29, 2022, to develop an understanding of its operations.

RECOMMENDATION

Commission Staff recommends that the Commission initiate the necessary actions to effect a merger of Milburn District into Graves District. The core issue is that Milburn District is, and has historically demonstrated, by both its financial performance and continued decline in customer base and volume of water sold, that it is too small to efficiently and cost effectively sustain itself. Regional demographics, including utility consolidation history supports this conclusion. Provision of water service and its preservation as a critical resource compels a structure that can invest in capital assets, and mitigate water system emergencies and expense fluctuations over a larger customer

⁶ Commission Staff's First Request for Information to Milburn District (Staff's First Request to Milburn District) (filed Mar. 31, 2022); Commission Staff's Second Request for Information to Milburn District (Staff's Second Request to Milburn District) (filed May 25, 2022); Commission Staff's Third Request for Information to Milburn District (Staff's Third Request to Milburn District) (filed Sep. 7, 2023); Commission Staff's Fourth Request for Information to Milburn District (Staff's Fourth Request to Milburn District) (filed Mar. 15, 2024).

⁷ Commission Staff's First Request for Information to Graves District (Staff's First Request to Graves District) (filed Sept. 7, 2023), Commission Staff's Second Request for Information to Graves District (Staff's Second Request to Graves District) (filed Mar. 15, 2024).

⁸ Scheduling Informal Conference PSC (filed Oct. 2, 2023); PSC Informal Conference Memo (filed Oct. 11, 2023).

⁹ Scheduling Informal Conference PSC (filed Jan. 30, 2024); PSC Informal Conference Memo (filed Feb. 8, 2024).

base. Graves District, which is currently operated by contract with Mayfield Electric & Water, has consistently demonstrated that it has the financial, managerial, and technical capacity as well as the geographic proximity to effectively consolidate and operate Milburn District. Consolidation of this utility epitomizes the General Assembly's determinations in KRS 74.361(1). The foregoing pages discuss applicable legal standards and Commission Staff's assessment of each district's long-term capacity to sustain its operations while providing fair, just and reasonable rates to its customers.

LEGAL STANDARD

The General Assembly of the Commonwealth of Kentucky has established that a reduction in the number of operating water districts is in the public interest and has authorized the Commission to act to determine the advisability of proposed mergers.

KRS 74.361 - Merger of water districts – Hearings – Orders¹⁰ states in part,

(1) The General Assembly of the Commonwealth of Kentucky determines as a legislative finding of fact that reduction of the number of operating water districts in the Commonwealth will be in the public interest, in that mergers of such districts will tend to eliminate wasteful duplication of costs and efforts, result in a sounder and more businesslike degree of management, and ultimately result in greater economies, less cost, and a higher degree of service to the general public; and that the public policy favors the merger of water districts wherever feasible.

(2) The Public Service Commission of Kentucky is authorized and empowered to initiate, carry out, and complete such investigations, inquiries, and studies as may be reasonably necessary to determine the advisability as to the merger of water districts. Prior to ordering a hearing with reference to the merger of any water district into one (1) or more additional

¹⁰ KRS 74.361 Merger of water districts – Hearing – Orders, (1), (2) at [statute.aspx \(ky.gov\)](http://statute.aspx(ky.gov)).

water districts, the Public Service Commission shall cause to be prepared in writing a feasibility report and study regarding the proposed merger, containing such studies, investigations, facts, historical data, and projections as in the circumstances may be required in order to enable the commission to formulate a proper decision regarding such merger.

Additionally, KRS 224A.304, Establishment of water and wastewater service regionalization account within infrastructure revolving fund, which became effective June 29, 2023, provides a funding mechanism to facilitate regionalization, mergers, and consolidation.¹¹ The statute states,

A water and wastewater service regionalization account is established within the infrastructure revolving fund. The purpose of the account shall be to enhance the effectiveness, reliability, and resilience of the state's water and wastewater systems, and where inefficiencies exist, to eliminate structural and administrative duplication of infrastructure and service delivery systems, by using a variety of tools, including but not limited to regionalization, merger, and consolidation. The authority shall manage the account as funding is authorized by the General Assembly and in a manner to achieve the purposes set out in KRS 224A.300.

Procedurally, under KRS 74.361, this report is the initial step required of the Commission in order to further investigate a merger possibility.

ANALYSIS METHODOLOGY

Commission Staff considered the following in the development of its recommendation.

1. Macro Considerations

¹¹ KRS 224A.304, Establishment of water and wastewater service regionalization account within infrastructure revolving fund at [statute.aspx \(ky.gov\)](https://legis.ky.gov/statute.aspx).

- a. Purchase Area Development District Region (Purchase Region)
population trends;
- b. Public water system consolidations – Purchase Region and
statewide;
- 2. Overview and analysis of Milburn District and Graves District, individually
 - a. Organization – governance (board members, vacancies, training),
management; employees (or contractors);
 - b. PSC case history: rates, investigations, other cases;
 - c. Historical financial overview
 - I. Customer Count, Gallons Sold, and Water Loss
 - II. Audit History
 - III. Income Statements
 - IV. Selected Balance Sheet Items
 - V. Fixed Assets
 - VI. Funding Other than General Rates and Debt
- 3. Alternatives Considered
- 4. Consolidated Financial Analysis

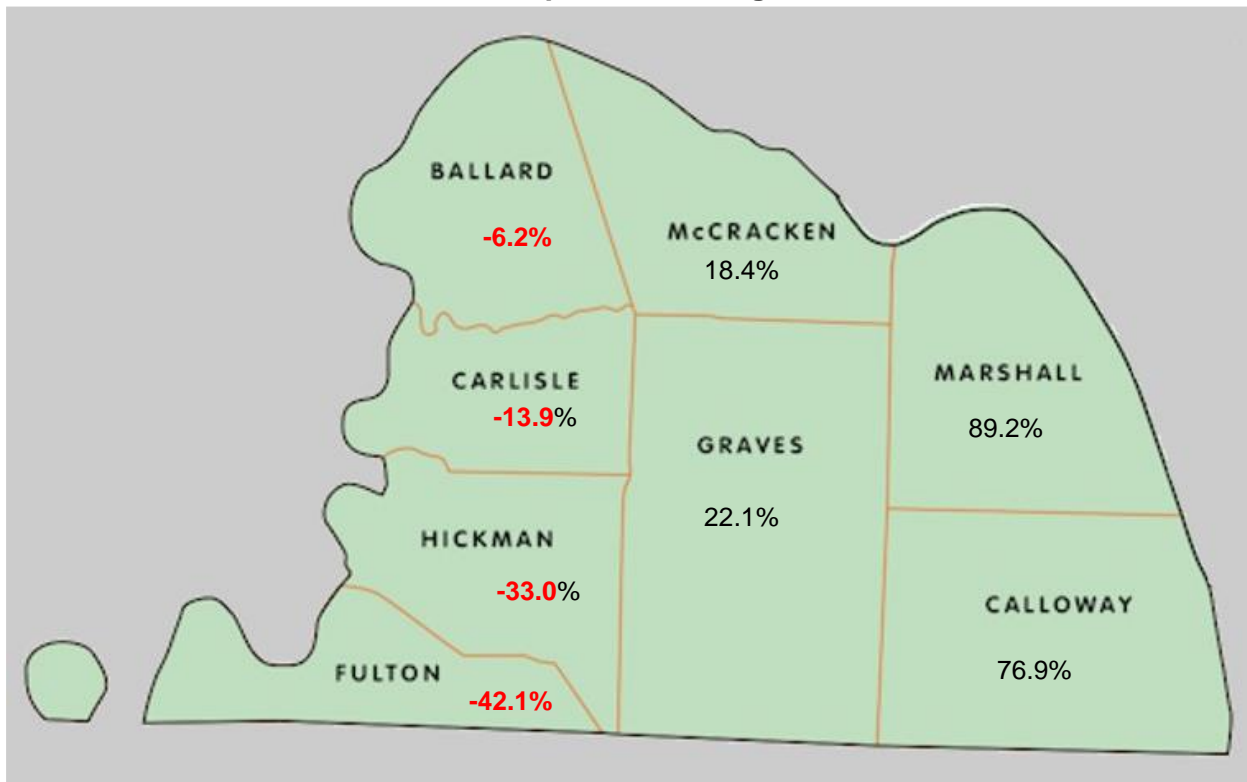
MACRO CONSIDERATIONS

a. Purchase Region Population Trends. Commission Staff reviewed population trends for the eight county area that encompasses the Purchase Region,¹² which includes Ballard, Calloway, Carlisle, Fulton, Graves, Hickman, Marshall, and McCracken counties, and for the Commonwealth in total. Figures 1 and 2 below are

¹² Purchase Area Development District provides a discussion of the region; <https://www.purchaseadd.org/about-us/> .

based on county population data from 1960 to 2020.¹³ Figure 1 provides a county map with population changes from 1960 to 2020. Figure 2 below provides decennial populations amounts by county and statewide from 1960 to 2020 with county populations sorted left to right in descending order of 2020 population. Additionally, Figure 2 shows that the largest population counties increased 38.6 percent while the smallest, western most counties decreased 26.1 percent.

Figure 1
Purchase Area Population Changes 1960 - 2020



¹³ U.S. Census Bureau, www.census.gov (Census years 1960-2020). Population and Housing Unit Estimates, County Population Totals and Components of Change (Kentucky). Retrieved Sep. 29, 2023: [County Population Totals: 2020-2023 \(census.gov\)](http://www.census.gov) .

**Figure 2
Purchase Area Counties and Statewide Population Trends**

Year	State	Population Growth Counties				Population Decline Counties				Region
		McCracken	Calloway	Graves	Marshall	Ballard	Fulton	Carlisle	Hickman	
1960	3,038,156	57,306	20,972	30,021	16,736	8,291	11,256	5,608	6,747	156,937
1970	3,218,706	58,281	27,692	30,939	20,381	8,276	10,183	5,354	6,264	167,370
1980	3,660,777	61,310	30,031	34,049	25,637	8,798	8,971	5,487	6,065	180,348
1990	3,685,295	62,879	30,735	33,550	27,205	7,902	8,271	5,238	5,566	181,346
2000	4,041,770	65,514	34,177	37,028	30,125	8,286	7,752	5,351	5,262	193,495
2010	4,339,367	65,565	37,191	37,121	31,448	8,249	6,813	5,104	4,902	196,393
2020	4,505,836	67,875	37,103	36,649	31,659	7,728	6,515	4,826	4,521	196,876
2020 v. 1960	48.3%	18.4%	76.9%	22.1%	89.2%	-6.8%	-42.1%	-13.9%	-33.0%	25.4%
Counties with Growth v. Declines - 2020 Compared to 1960					38.6%	-26.1%				

b. History of Public Water Systems Consolidation Within the State and Region.

The history of public water systems consolidation in Kentucky is recognized nationwide¹⁴ with a reduction of over 80 percent in the number of public water systems since 1974, going from 2,178 to 394 systems. Figure 3 shows the reduction of systems at various time points since 1974.¹⁵

¹⁴ Environmental Policy Innovation Center and UCLA Luskin Center for Innovation, Outliers in Water Utility Consolidation, https://static1.squarespace.com/static/611cc20b78b5f677dad664ab/t/614a48500ddb7b1c1b67a41e/1632258131082/WaterSystem_ConsolidationOpportunities.pdf;

American Water Works Association ACE23 Presentation June 11-14, 2023, Toronto, https://www.awwa.org/Portals/4/2023/PDFs/Resources/WED41_02-Partnerships-Regionalizing-and-Privatizing-In-the-Water-Industry.pdf;

UCLA Luskin School of Public Affairs, Luskin Center for Innovation, Adopting County Policies which Limit Public Water System Sprawl and Promote Small System Consolidation, https://innovation.luskin.ucla.edu/wp-content/uploads/2019/03/Adopting_County_Policies_which_Limit_Public_Water_System_Sprawl_and_Promote_Small_System_Consolidation.pdf

¹⁵ National Governors Association Presentation, October 31, 2018, Gary Larimore, Executive Director, Kentucky Rural Water Association (Slide 17).

**Figure 3
Number of Public Water Systems (PWS) in Kentucky**

Year	Transient Non-Community Water Systems	Non-Transient Community Water	Community Water Systems	Total PWS	Change
1974	1,058	252	868	2,178	
1979	805	252	755	1,812	-17 %
1989	400	215	639	1,254	-31 %
1999	199	85	497	781	-38 %
2009	49	26	409	484	-38 %
2018	25	14	355	394	-19 %

Note: Total PWS is the sum of transient non community water systems (TNCWS), non-transient community water systems (NTNCWS), and community water systems (CWS).

A list of merger cases over the last 30 years administered by the Commission as well as non-jurisdictional utilities that were acquired by larger utilities is attached in Appendix A. Of the 25 systems listed in Appendix A, 16 are within the Purchase Area region, of which six comprise the Graves County Water District. Additionally, 11 of the systems had 500 or fewer customers, five had between 500 and 1,000 customers, and six had in excess of 1,000 customers. Customer information for three systems was not available. Three of the six systems with more than 1,000 customers were consolidated into Paducah Water, a municipal water provider which serves the largest population in the region.¹⁶

MILBURN DISTRICT OVERVIEW AND ANALYSIS

¹⁶ Case No.1999-00348, *Joint Petition of the Paducah Water Works and the Reidland Water District to Approve the Transfer of Ownership and Control of the Reidland Water District to the Paducah Water Works* (Ky. PSC Oct 7, 1999), final Order; Case No. 2012-00156, *Joint Petition of Paducah Water Works and Hendron Water District to Approve the Transfer of Ownership and Control of Hendron Water District to Paducah Water Works* (Ky. PSC July 2, 2012), Order; Case No. 2021-00374, *Electronic Joint Application of Paducah Water Works and West McCracken County Water District for Approval of Transfer of West McCracken Water District* (Ky. PSC Dec. 6, 2021), final Order.

a. Organization. Milburn District is a water utility district organized pursuant to KRS Chapter 74 that owns and operates a water distribution system through which it provides retail water service to approximately 125 customers residing in Carlisle County, Kentucky.¹⁷ Its last adjustment of rates pursuant to 807 KAR 5:076 was approved on March 7, 2019 and increased revenues from rates by \$10,401, or 20.28 percent.¹⁸ It has three commissioners that are not compensated with terms that expire on December 31, 2025, 2026, and 2027.¹⁹ Two commissioners were appointed in early 2024²⁰ after two commissioners resigned effective December 31, 2023.²¹ The Commissioner Info page of the Commission website for Milburn District provides contradicting information about compensation and term expirations as shown below.

COMMISSIONER / BOARD MEMBER	TITLE	BEGINNING TERM DATE	ENDING TERM DATE	COUNTY OF RESIDENCE	SALARY	SUBMITTED BY	DATE SUBMITTED
Ben Bevins	Commissioner	02/01/2024	02/01/2026	Carlisle	\$600.00	Eric Young	02/24/2024
Chris Williams	Commissioner	01/01/2020	12/31/2025	Carlisle	\$0.00		09/28/2022
Ernie Scarrett	Commissioner	02/01/2024	02/01/2026	Carlisle	\$600.00	Eric Young	02/24/2024

Commission Staff's Fifth Request for Information from Milburn District requested clarification, but Milburn District did not respond.²²

¹⁷ *Annual Report of Milburn Water District to the Public Service Commission for the Calendar Year Ended December 31, 2022* (2022 Annual Report of Milburn District) at 12 and 39.

¹⁸ Case No. 2018-00314, *Application of Milburn Water District for an Alternative Rate Adjustment* (Ky. PSC Mar. 7, 2019).

¹⁹ 2022 Annual Report of Milburn District at 15.

²⁰ Milburn District's Response to Staff's Fourth Request, Item 10 at unnumbered pages 10, 17, and 19.

²¹ PSC Letter Filing Document into the Record (filed Nov. 3, 2023); PSC Letter Filing Document into the Record (filed Nov. 17, 2023).

²² Staff's Fifth Request to Milburn District, Items #5a, #5b, and #5c.

Milburn District's technical management functions are performed by a contracted Class II-BD licensed operator who is paid \$570 per month under a verbal agreement with the Commissioners. In the event of this operator's absence, another individual with a Class I-BD license performs required functions. Billing and administrative functions are performed by a contractor for \$600 per month under a verbal agreement. The annual report is prepared by a contractor for \$200 under a verbal agreement. In the event of an absence of any of the described positions, a separate Class I-BD licensed operator performs the functions.²³ The operator back-up is the daughter of the individual who performs management functions and is a Class II-BD licensed operator. Commission Staff requested information about the relationships and qualifications of the other parties to the manager as well as their qualifications, but Milburn District did not respond.²⁴ Commission Staff requested information about whether the manager manages other utilities, but Milburn District did not respond.²⁵

b. PSC Case History. Milburn District has filed applications for three rate cases²⁶ since 2000.²⁷ Additionally, Milburn District was a party to Case No. 2019-

²³ Milburn District's Response to Staff's Fourth Request.

²⁴ Staff's Fifth Request to Milburn District, Items #2 and #3.

²⁵ Staff's Fifth Request to Milburn District, Item #1c.

²⁶ Case No. 2004-00485, *Application of Milburn Water District for an Adjustment of Rates Pursuant to the Alternative Rate Filing Procedure for Small Utilities* (Ky. PSC Feb. 14, 2005); Case No. 2011-00425, *Alternative Rate Adjustment Filing of Milburn Water District* (Ky. PSC Mar. 5, 2012); Case No. 2018-00314, *Application of Milburn Water District for an Alternative Rate Adjustment* (Ky. PSC Mar. 7, 2019).

²⁷ Case No. 2021-00341, *An Electronic Investigation Into Milburn Water District to Determine the Feasibility of Merger With a Proximate Utility Pursuant to KRS 74.361 or Abandonment Pursuant to KRS 278.020(6), KRS 278.021* (Ky. PSC Mar. 31, 2022), opening Order.

00041.²⁸ During Case No. 2019-00041, the Commission ordered Milburn District to pursue merging with Graves District.²⁹ However, Milburn District did not file any response in the record of the case. On July 30, 2021³⁰ the Commission ordered Milburn District to respond to its November 22, 2019 Order and Milburn District did not respond, which resulted in the initiation of the current investigation. In the study from Case No. 2019-00041, *Confronting the Problems Plaguing Kentucky's Water Utilities*, of which Milburn was one of the subject utilities, the Commission stated,

Milburn District repeatedly demonstrated that it does not have sufficient business acumen to analyze its financials or use financial tools available to it in terms of financial forecasting, budgeting, or even the review of financial statements presented at monthly board meetings. For example, approximately 10 years ago, Milburn District developed a project that would replace the district's aging AC lines at a cost of \$1.5 million. In response to Staff's post-hearing data request, Milburn District submitted a Drinking Water Project Profile from KIA's Water Resource Information System. According to the Project Profile, all of Milburn District's AC lines are either failing or are expected to fail in the near future. The Project Profile estimates that the AC line replacement project would cost \$10,714 per household in the district. This cost estimate was based on the number of households in the district at the time the proposal was developed. The number of households served by the district has declined since then, so the estimated cost per household currently in the district would be higher. (August 27, 2019 Hearing Transcript 21:18-21:42). Milburn District's customer base cannot afford to borrow this amount. (Id. at 23:16-23:28). The lack of business acumen regarding Milburn District's financial position

²⁸ Case No. 2019-00041, Mar. 12, 2019 Order.

²⁹ Case No. 2019-00041, Nov. 22, 2019 Order, Appendix F at 22 of 106.

³⁰ Case No. 2019-00041, July 30, 2021 Order, ordering paragraph 4.

adversely impacts its ability to render safe, adequate, and reliable service.

The Commission directed Milburn District within six months of the Final Order in Case No. 2019-00041 to consider and pursue merger or consolidation with Graves County Water District (Graves District); and file with the Commission a written report on the status of its discussions with Graves District regarding a possible merger or consolidation of the districts. Milburn was very open to merger or consolidation.³¹

c. Historical Financial Overview. The discussion and Figure 4 below is based on information obtained from annual reports that were filed with the Commission for 2000, 2010, and 2017 through 2022.³²

Customer Count, Gallons Sold, and Water Loss - From 2000 to 2022 Milburn District reported a 23 percent decrease in customers from 154 to 125 and a 72 percent decrease in gallons of water sold from 8.575 million gallons to 4.982 million gallons. Water loss was in the 13 percent range in 2000 and 2010 but increased to an average of 36 percent during the six year period from 2017 to 2022. Commission Staff notes that reported gallons sold in 2022 decreased from 2021 by 838,000, or 14.4 percent. Average revenue per thousand gallons reflected an increase of \$1.03, or 9.81 percent from \$10.53 to \$11.56. Commission Staff is concerned that the gallons sold, and revenues recorded amounts are disconnected in the reported 2022 results, given the significant increase in the average revenue per thousand gallons sold in the absence of any rate adjustments.

³¹ Case No. 2019-00041, Nov. 22, 2019 Order, Appendix F at 74 of 106.

³² 2000 Annual Report of Milburn District; 2010 Annual Report of Milburn District; 2017 Annual Report of Milburn District; 2018 Annual Report of Milburn District; 2019 Annual Report of Milburn District; 2020 Annual Report of Milburn District; 2021 Annual Report of Milburn District; 2022 Annual Report of Milburn District.

Figure 4
Milburn District Selected Financial and Statistical Information

Description	2000	2010	2017	2018	2019	2020	2021	2022
Customer Count	154	147	136	128	128	129	127	125
Gallons Purchased	9,903	8,252	9,836	9,917	9,940	11,469	10,435	7,947
Gallons Sold	8,575	7,181	5,590	5,977	6,098	5,770	5,820	4,982
System Loss %	0.4101	0.7756	5.4392	4.8906	4.8290	5.0746	6.7370	7.0593
Water Loss %	13.0000	12.2031	37.7288	34.8392	33.8229	44.6159	37.4892	30.2504
Water and System Loss %	13.4101	12.9787	43.1680	39.7298	38.6519	49.6905	44.2262	37.3097
Avg Customer Gallons / Month	4,640	4,071	3,425	3,891	3,970	3,727	3,819	3,321
Unit Revenue \$ (000s)	\$ 6.39	\$ 8.17	\$ 10.02	\$ 10.31	\$ 10.64	\$ 10.72	\$ 10.53	\$ 11.56
Unit Purchased Water \$ (000s)	\$ 2.17	\$ 2.31	\$ 2.46	\$ 2.69	\$ 2.81	\$ 3.00	\$ 3.24	\$ 3.20

Audit History – The Commission does not have any audited financial statements on file for Milburn District.³³

Income Statement – Condensed income statements for 2000, 2010 and 2017 through 2022 are presented in Figure 5 below. Commission Staff made one adjustment for a known omission in 2020 expenses. Milburn District purchases all of its water from Graves District at a current rate of \$3.07 per thousand gallons.³⁴ Milburn District reported a net operating loss for every year reviewed with the exception of 2000. It applied for a rate increase on September 17, 2018³⁵ based on a 2017 test year and received an increase of 20.28 percent, or \$10,401 on March 7, 2019. In March 2021, the Carlisle County Fiscal Court paid \$5,000 in 2020 operating expenses of Milburn District. The expenses were not reflected in Milburn District’s annual report; however, they are

³³2000 Annual Report of Milburn District; 2010 Annual Report of Milburn District; 2017 Annual Report of Milburn District; 2018 Annual Report of Milburn District; 2019 Annual Report of Milburn District; 2020 Annual Report of Milburn District; 2021 Annual Report of Milburn District; 2022 Annual Report of Milburn District.

³⁴ Graves District Tariff, Sheet No. 2.1, (effective June 1, 2021).

³⁵ Case No. 2018-00314, Mar. 7, 2019 Order.

included in the pro-forma financial results below.³⁶ Commission Staff notes that Milburn District has not applied for a rate increase since 2018 despite its continuing losses.

**Figure 5
Milburn District Income Statement Snapshot**

Description / Year	PSC Annual Reports (unaudited)							
	2000	2010	2017	2018	2019	2020	2021	2022
<i>Income Statement</i>								
Revenues	\$ 54,769	\$ 58,662	\$ 56,032	\$ 61,607	\$ 64,885	\$ 61,880	\$ 61,279	\$ 57,603
Operating Expenses								
Purchased Water	21,459	19,102	24,230	26,665	27,946	34,357	33,763	25,430
Purchased Power	1,082	1,458	2,098	2,959	2,756	2,498	2,359	1,984
Other Expenses	17,721	32,198	29,836	35,433	32,780	33,773	30,640	32,980
Depreciation	8,250	8,647	6,155	3,287	3,287	3,146	2,919	2,686
Taxes Other Than Income	572	1,612	1,771	0	0	0	0	0
Adj - Paid by Fiscal Court	0	0	0	0	0	5,000	0	0
Total Expenses	49,084	63,017	64,090	68,344	66,769	78,774	69,681	63,080
Operating Income	5,685	(4,355)	(8,058)	(6,737)	(1,884)	(16,894)	(8,402)	(5,477)
Other Income	288	0	0	0	0	0	0	0
Interest Expense ()	(1,650)	0	0	0	(492)	(213)	(457)	(467)
Net Income / (Loss)	\$ 4,323	\$ (4,355)	\$ (8,058)	\$ (6,737)	\$ (2,376)	\$ (17,107)	\$ (8,859)	\$ (5,944)
Net % of Revenues	7.9%	-7.4%	-14.4%	-10.9%	-3.7%	-27.6%	-14.5%	-10.3%

Selected Balance Sheet Items – Milburn District reported an \$885 cash balance at the end of 2022 and days sales outstanding in accounts receivable was just under 30. It obtained a \$10,150 bank loan for working capital on September 20, 2018, which was replaced by a second note on December 4, 2020, which was replaced by a third note on November 23, 2022. Milburn District stated, “Each note was rolled into the next one.”³⁷ While each note was issued for a two-year period, it appears that the initial note dated September 20, 2018, was not rolled into a new note until after the September 20, 2020 maturity date as the second note was not executed until December 4, 2020. The reported

³⁶ Milburn District’s Response to Staff’s Third Request, Item 2.

³⁷ Milburn District’s Response to Staff’s Third Request, Items 4a and 4c; Promissory Note Dated 9/20/2018 – CDB; Promissory Note Dated 12/04/2020 – CDB; Promissory Note Dated 11/23/2022 – CDB.

balance was \$12,195 at the end of 2022 and \$10,172.57 on March 28, 2024.³⁸ Commission Staff notes that (1) the actual term length of the initial note being in excess of two years, and (2) the time from issuance of the first note on September 20, 2018, until maturity of the third note on November 23, 2024, exceeding six years may be violations of KRS 278.300. At the end of 2022, Milburn District reported net equity of \$13,543. Commission Staff believes this amount is overstated due to a possible overstatement of the net book value of a fixed asset that is described below.

Fixed Assets - Milburn District reported gross fixed assets of \$296,274 and accumulated depreciation of \$276,045 for a net book value of \$20,229, or 6.8 percent of cost, as of December 31, 2022.³⁹ It did not record any capital spending during the period from 2017 through 2022. It included a fixed asset list in its 2018 alternative rate filing application.⁴⁰ Selected columns of the list are provided in Appendix C. Columns that do not add value were hidden to enhance readability due to the small print of the original document. Commission Staff notes that an item designated “Paint tower” dated July 1, 2006, at a cost of \$22,405 lists a depreciation life of 43 years and a 2017 net book value of \$16,152. A subsequent entry designated as “Tower Paint J (text truncated)” on July 14, 2014, at a cost of \$19,900 reflects a ten-year depreciation life. Commission Staff believes the 43 year depreciation life is erroneous and that the correct life should be ten years, which overstates the reported net book value. If a ten-year life had been utilized, the net book value at the end of 2017 would have been zero.

³⁸ Milburn District’s Response to Staff’s Fourth Request at unnumbered 9 of 19.

³⁹ 2022 Annual Report to Milburn District at 16.

⁴⁰ Case No. 2018-00314, Sept. 17, 2018 Application at 13.

Graves District submitted its estimate of the immediate cost of the necessary Milburn District's infrastructure upgrades that would be required to bring the system up to the standard that Mayfield Electric and Graves District would expect in order to operate the Milburn Water District. This estimate was approximately \$585,000 in January 2023. Graves District noted that this would assist in reducing the logistical and staffing burden of a consolidation. It subsequently updated the amount to \$635,000 as shown in Figure 6 below.⁴¹ In its October 6, 2023 response to a Commission data request, it stated that its original estimate could be significantly higher and explained that the \$50,000 additional estimate for a System Inventory is due revisions to the U.S. Environmental Protection Agency (USEPA)'s Lead and Copper Rule as well as the need for GIS mapping of Milburn District's facilities. When asked about how it will comply with the lead copper rule Milburn District stated "Milburn District's operator, Eric Young continuously evaluates the monitoring schedule and any revisions to monitoring requirements. The monitoring schedule is reviewed by the system operator and Milburn District is currently in compliance with all Kentucky Division of Water monitoring requirement regulations."⁴² Commission Staff notes that Milburn District's response did not articulate how it would comply specifically, if necessary, with the lead and copper rule. It is important to note that the Kentucky Division of Water is the primacy agency for the USEPA and is responsible for enforcing all USEPA drinking water standards in the Commonwealth of Kentucky.

⁴¹ Graves District Response to Staff's First Request, Appendix A at 6, Item A-1a at unnumbered 5 of 34.

⁴² Milburn District Response to Staff's Fourth Request, Items #7a and #7b.

Figure 6

Item	Description	Amount
1	AMI system, M400B2 collector, will require propagation study	\$ 50,000
2	Approximately 130 Sensus AMI meters, smartpoints, lids	60,000
3	SCADA/Communications/Controls/Actuator Valve	50,000
	Mapping/Meter Tech time to identify DMA sites & Change out	
4	meter sets	50,000
5	DMA Sites (District Metered Area)	25,000
6	Tank Rehab & Painting	350,000
	Original Amount (Brent Schultz, Jan. 20, 2023)	\$ 585,000
7	System Inventory (response to data request, Oct. 6, 2023)	50,000
	Total	<u>\$ 635,000</u>

Funding Other than General Rates and Debt - Milburn District was awarded Cleaner Water Program grants for \$174,816 (21CWW0026)⁴³ and \$293,154 (22CWW273)⁴⁴ for project WX21039033. Milburn District stated that the grants are to be obligated by December 31, 2024, and fully expended by December 31, 2026.⁴⁵ Commission Staff requested Milburn District to provide the sources of funding for the funding gap of \$1,032,030 and Milburn District stated “Carlisle County is trying to get more funding for this project.”⁴⁶ Commission Staff notes that the \$1,500,000 budget for the project has not been updated since September 16, 2013.⁴⁷ Commission Staff neither evaluated the original cost estimate for the project or the current cost amount, which,

⁴³ Milburn District Response to Staff’s Third Request.

⁴⁴ Milburn District Response to Staff’s Third Request.

⁴⁵ Milburn District Response to Staff’s Third Request, Item 1d.

⁴⁶ Milburn District Response to Staff’s Third Request, Item 1f.

⁴⁷ Kentucky Infrastructure Authority, <https://wris.ky.gov/Portal/DWPrjData/WX21039033>. Budget information is listed on the Budget & Schedule tab. Budget Info Last Modified date of Sept. 16, 2013, as of April 4, 2024, is listed on the Audit tab.

given the length of time since the last update, could be significantly higher. Milburn District stated in its response to Commission Staff's fourth request for information that it had met with Purchase Area Development District (PADD) representatives and an engineering firm in October 2023 to discuss water system improvements. However, it did not provide any information about discussions of funding opportunities or any particular outcome of the meeting. It further stated that it had not pursued any specific funding efforts other than the meeting with PADD.⁴⁸ Commission Staff notes that four project profiles for Milburn District are listed in the Kentucky Infrastructure Authority (KIA) Water Resource Information System (WRIS), none of which reflect any attempt by Milburn District to apply for KIA funding.⁴⁹

GRAVES DISTRICT OVERVIEW AND ANALYSIS

a. Organization. Graves County Water District (Graves District) is a water utility district organized pursuant to KRS Chapter 74⁵⁰ that owns and operates a water distribution and treatment system, through which it provides retail water service to approximately 4,854 customers residing in Graves and Carlisle Counties, Kentucky.⁵¹ The district was created in 2008 by the merger of four water districts formerly known as

⁴⁸ Milburn District Response to Staff's Fourth Request, Items 8b and 8c.

⁴⁹ Kentucky Infrastructure Authority, Water Resource Information System (WRIS) <https://wris.ky.gov/portal/DwSysData/KY0200284>, Projects tab.

⁵⁰ Case No. 2007-00496, *Joint Application of Consumers Water District, Fancy Farm Water District, Hardeman Water District, and South Graves Water District for Approval of Merger and Formation of Graves County Water District* (Ky. PSC May 21, 2008), final Order.

Commission Staff notes that Graves District's audited financial statements for the year ended December 31, 2022, Note 1, Description of Entity & Significant Accounting Policies, states that Graves District was created under Chapter 14 of the Kentucky Revised Statutes, Department of State.

⁵¹ *Annual Report of Graves County Water District for Water to the Public Service Commission for the Calendar Year Ended December 31, 2022* (2022 Annual Report of Graves District) at 12 and 49.

Consumers (1,669 customers), Fancy Farm (436 customers), South Graves (670 customers) and Hardeman (336 customers)⁵² for a total of 3,111 customers. Effective January 1, 2013, Hickory Water District (1,376 customers) was merged with Graves District.⁵³ Effective May 1, 2016, Sedalia Water District (142 customers) was merged with the Graves District.⁵⁴ Graves District also owns and operates a sewer collection system through which it provides sewer service to approximately 193 customers residing in Graves County, Kentucky.⁵⁵ Graves District is the sole supplier of water to Milburn District from its Fancy Farm location. The distance from the Fancy Farm supply location to the Milburn District master meter is approximately 3.7 miles⁵⁶ and the distance from Fancy Farm to the Milburn District tank is approximately 5.9 miles⁵⁷

Graves District does not have any employees and is managed under a contract with Mayfield Electric and Water Systems (MEWS).⁵⁸ Both systems experienced

⁵² Case No. 2007-00496, *Joint Application of Consumers Water District, Fancy Farm Water District, Hardeman Water District, and South Graves Water District for Approval of Merger and Formation of Graves County Water District* (Ky. PSC May 21, 2008), final Order.

⁵³ Case No. 2012-00358, *Joint Application of Hickory Water District and Graves County Water District for Approval of Proposed Merger* (Ky. PSC Sep. 27, 2012).

⁵⁴ Case No. 2015-00296, *Application of Graves County Water District for Transfer of Ownership and Control of Sedalia Water District* (Ky. PSC Jan. 28, 2016).

⁵⁵ 2022 Annual Report of Graves District.

⁵⁶ Google Maps, [Fancy Farm Water Tower, Fancy Farm, KY to 36.8002446, -88.8621326 - Google Maps](#)

⁵⁷ Google Maps, [Fancy Farm Water Tower to 6991-7099 KY-80, Arlington, KY 42021 - Google Maps](#)

⁵⁸ Kentucky Public Service Commission, Tariffs Library, Graves County Water District, Contracts.

extensive damage from the December 10, 2021 tornado event.⁵⁹ Graves District stated that MEWS provides eleven full-time equivalents to support Graves District and that in the event that employees assigned to service Graves District are unavailable, MEWS would assign other employees to perform the required functions. It noted that during the post tornado event MEWS was able to continue to provide service to both Mayfield customers and Graves District despite significant damage to MEWS' facilities.⁶⁰

b. PSC Case History. Since its formation, Graves District has had eleven cases before the Commission of which two related to transfers of ownership (mergers), one to establish a water loss surcharge, two Alternative Rate Filings (ARFs), and a number of construction and financing cases.⁶¹ Additionally, on August 30, 2022 Graves District was made a party to Case No. 2021-00341.⁶² In Case No. 2018-00429 Graves District's rate structure was unified for the legacy Graves District entities, Hickory Water District, and Sedalia Water District. Rates were also increased by approximately 14.17% to provide an additional \$233,647 in revenues. A \$5.00 per month per customer water loss surcharge was also approved for a period of seventy-two months.⁶³

⁵⁹ Federal Emergency Management Agency Docket No. FEMA-3575-EM, <https://www.fema.gov/disaster-federal-register-notice/3575-em-ky-initial-notice> (Dec. 11, 2021); Docket No. FEMA-4630-DR, <https://www.fema.gov/disaster-federal-register-notice/4630-dr-ky-initial-notice> (Dec. 12, 2021).

⁶⁰ Graves District Response to Staff's Second Request, Item 1a.

⁶¹ Graves District Cases with the KY Public Service Commission, [KY Public Service Commission Master Utility Search](#) (enter Graves in Utility Name).

⁶² Order (Ky. PSC. Aug. 30, 2022).

⁶³ Case No. 2018-00429, *Application of Graves County Water District for an Alternative Rate Adjustment* (Ky. PSC. Sept. 30, 2019).

c. Historical Financial Overview. The information provided in Figure 7 below was obtained from annual reports and audited financial statements that were filed with the Commission.⁶⁴

Customer Count, Gallons Sold, and Water Loss – From the end of 2016, which is the first year that legacy Sedalia Water District customers were included in Graves District customer count, to 2022, Graves District customer count increased 102 from 4,752 customers to 4,854 customers, or 2.36%. Average gallons sold from 2017 to 2022, excluding sales to Milburn District, was 255.863 million while water loss averaged 28.75 percent.

**Figure 7
Graves District Selected Financial and Statistical Information**

<i>Description</i>	2017	2018	2019	2020	2021	2022
Customer Count	4,759	4,792	4,824	4,856	4,835	4,854
Gallons Produced	239,423	264,951	229,856	196,589	166,255	231,413
Gallons Purchased	145,472	125,692	165,996	161,276	172,965	157,875
Total Supply	384,895	390,643	395,852	357,865	339,220	389,288
Gallons Sold	269,553	265,484	260,652	263,407	264,075	271,552
System Loss %	1.4419	0.9881	0.0265	0.0000	0.0000	0.0000
Water Loss %	28.5252	31.0511	34.1277	26.3949	22.1525	30.2439
Water and System Loss %	29.9671	32.0392	34.1542	26.3949	22.1525	30.2439
 Avg Customer Gallons Sold / Month	 4,720	 4,617	 4,503	 4,520	 4,551	 4,662
 <i>Gallons Sold Excluding Milburn</i>						
Gallons Sold	269,553	265,484	260,652	263,407	264,075	271,552
Less Sold to Milburn ()	(9,836)	(9,917)	(9,940)	(11,469)	(10,435)	(7,947)
Adjusted Consumption	259,717	255,567	250,712	251,938	253,640	263,605
 Yr / Yr Adjusted Consumption Change		 -1.6%	 -1.9%	 0.5%	 0.7%	 3.9%

Audit History – Graves District’s financial statements are audited annually and are filed with the Commission.⁶⁵

⁶⁴ Graves County Water District Report Filings, [UMS-7001200-Graves County Water District \(ky.gov\)](https://psc.ky.gov/UMS-7001200-Graves%20County%20Water%20District) .

⁶⁵ Graves Water District Report Filings, https://psc.ky.gov/UMS_New/Utility/Reports.

Income Statement – Condensed income statements for 2017, which is the first year of operations inclusive of Sedalia Water District, through 2022 are presented in Figure 8 below. Commission Staff made adjustments based on responses from Graves District, review of Graves District’s audited financial statements, and information obtained from Graves District’s filings in Case No. 2019-00347.⁶⁶ Adjustments were made to remove water loss surcharge income, related operating expenses⁶⁷ grant proceeds that were designated for capital expenditures, and an insurance claim settlement. Commission Staff did not attempt to isolate any operating revenue or expense impacts related to the tornadoes from the 2021 and 2022 amounts. Commission Staff notes that its adjustments were not audited and, while they may not be precise, it does not believe any discrepancies would materially change its analysis or recommendation. Graves District’s pro forma losses averaged about \$260,000 for 2017 through 2019 and it averaged pro forma losses of about \$85,000 for the years 2020 through 2022. The improvement for the 2020 through 2022 period primarily reflects the benefit of the 14.1 percent (\$233,647 additional revenues) rate increase that was approved in 2019.

⁶⁶ Case No. 2019-00347, *Electronic Graves County Water District’s Unaccounted for Water Loss Reduction Plan, Surcharge and Monitoring*.

⁶⁷ Graves District’s Response to Staff’s Second Request, Item A-2c.

**Figure 8
Graves District Income Statement Snapshot**

Rate 2018-00429
09/30/19

Description / Year	Audited - Water 2017	Audited - Water 2018	Audited - Water 2019	Audited - Water 2020	Audited - Water 2021	Audited - Water 2022
<i>Income Statement</i>						
Revenues	\$ 1,604,051	\$ 1,622,560	\$ 1,775,964	\$ 2,222,669	\$ 2,253,137	\$ 2,303,421
Operating Expenses						
Purchased Water	239,999	271,028	321,680	349,213	301,205	361,579
Contractual Services (Mgt Svcs)	839,637	769,600	902,253	943,734	983,495	1,052,120
Other Expenses	437,895	446,293	454,572	459,517	561,702	626,122
Depreciation	329,397	331,370	329,097	329,189	341,733	336,786
Taxes Other Than Income	5,450	5,512	5,975	5,369	6,665	6,399
Total Expenses	1,852,378	1,823,803	2,013,577	2,087,022	2,194,800	2,383,006
Operating Income	(248,327)	(201,243)	(237,613)	135,647	58,337	(79,585)
Other Income	1,542	606	1,090	919	604	527,144
Non-Utility Income	750	0	500	0	0	212,692
Non-Utility Expenses ()	(1,750)	(750)	(4,124)	(10,032)	(1,050)	0
Interest Expense ()	(23,326)	(21,979)	(23,155)	(25,984)	(17,262)	(13,129)
Extraordinary Items	1,384	0	0	0	14,268	
Net Income / (Loss)	(269,727)	(223,366)	(263,302)	100,550	54,897	647,122
<i>Pro Forma Adjustments</i>						
Water Loss Surcharge ()	0	0	(47,955)	(288,790)	(289,430)	(275,670)
Water Loss Spending ()	0	0	24,058	175,398	200,524	165,495
Federal Grant Proceeds ()	0	0	0	0	0	(524,958)
Insurance Reimbursements ()	0	0	0	0	0	(219,650)
Total Adjustments	-	-	(23,897)	(113,392)	(88,906)	(854,783)
Pro Forma Income / (Loss)	\$ (269,727)	\$ (223,366)	\$ (287,199)	\$ (12,842)	\$ (34,009)	\$ (207,661)
Net % of Revenues	-16.8%	-13.8%	-16.2%	-0.6%	-1.5%	-9.0%

Selected Balance Sheet Items – Graves District reported \$748,345 in cash and investments (including restricted funds) at the end of 2022 and days sales outstanding in accounts receivables was 28.4. It reported three Fund “B” loans with KIA and a small note payable to the Graves County Fiscal Court for total debt of \$747,783.⁶⁸ At the end of 2022 Graves District reported net equity of \$7,591,012.

⁶⁸ Graves District Audited Financial Statements for the Year Ended December 31, 2022, Note 9.

Fixed Assets - Graves District reported gross fixed assets of \$18,295,292 and accumulated depreciation of \$10,851,340 for a net book value of \$7,443,952, or 40.7 percent of cost, as of December 31, 2022.⁶⁹ Graves District had \$1,191,385 in capital expenditures from 2017 through 2022 including \$524,958 in 2022 for rehab and painting of the South Graves and Sedalia water tanks, both of which were grant funded.⁷⁰

Funding Other than General Rates and Debt - Graves District was awarded \$1,659,428 for three projects from the 2021 and 2022 Cleaner Water Grant Programs.⁷¹ In Case No. 2018-00429, Graves District requested and was approved to implement a Water Loss Detection and Repair Surcharge of \$5.00 per customer per month for seventy-two months to provide \$1,721,160 in funds to address water loss issues.⁷² Based on filings in a separate monitoring case Graves District had billed \$1,208,190 and expended \$1,041,889 in water loss surcharge funds through January 2024.⁷³

ALTERNATIVES

Commission Staff considered five alternatives.

1. Milburn District operates as usual and remains an independent entity.

Milburn District has not made any appreciable strides to improve its financial and

⁶⁹ Graves County Water District Audited Financial Statements for the Year Ended December 31, 2022 at 18.

⁷⁰ Graves District Audited Financial Statements for the Year Ended December 31, 2022, Note 11.

⁷¹ Kentucky Infrastructure Authority WRIS Grant Portal, <https://wris.ky.gov/portal/CWP>, WX21083080 (2021), WX21083082 (2022), and WX21083085 (2022).

⁷² Case No. 2018-00429, *Application of Graves County Water District for an Alternative Rate Adjustment* (Ky. PSC Sept. 30, 2019).

⁷³ Case No. 2019-00347, *Electronic Graves County Water District's Unaccounted for Water Loss Reduction Plan, Surcharge and Monitoring* (Ky. PSC Sept. 30, 2019).

operating condition since the study that was published in Case No. 2019-00041 discussed previously was released. Milburn District has experienced a continual financial deterioration due to its declining customer base, long term water loss issues, an inability or unwillingness to invest in its system, and an inability or unwillingness to manage its rate structure to maintain financial stability. While it was awarded two grants to fund a significant project, it has not completed the planning process and financing that is necessary to execute the project. The Commission’s mission is “to foster the provision of safe and reliable service at a reasonable price to the customers of jurisdictional utilities while providing for the financial stability of those utilities by setting fair and just rates, and supporting their operational competence by overseeing regulated activities.”⁷⁴ Permitting this utility to continue independently would be a failure of the Commission to protect the customers of Milburn District.

2. Merger of Milburn District and Cunningham Water District (Cunningham District). The Commission has an active case concerning the feasibility of merger of Cunningham District with a proximate utility.⁷⁵ Cunningham District had 151 customers, \$47,935 in revenues, and did not report any employees for 2022.⁷⁶ Due to the small size and similar operating structure as Milburn District, Commission Staff could not identify any significant benefits of a combination.

⁷⁴ Kentucky Public Service Commission web site, <https://psc.ky.gov/Home/About#AbtComm>.

⁷⁵ Case No. 2021-00451, *Electronic Investigation into Cunningham Water District to Determine the Feasibility of Merger with a Proximate Utility Pursuant to KRS 74.361 or Abandonment Pursuant to KRS 278.020(6), KRS 278.021* (filed Dec. 15, 2021).

⁷⁶ *Annual Report Cunningham District to the Public Service Commission for the Calendar Year Ended December 31, 2022* at 39.

3. Larger utility to contractually manage Milburn District. While this approach could give Milburn District broader access to management and engineering expertise and potential cost leverage on purchases, these potential benefits do not outweigh the small size of Milburn District, which limits its capacity to cost effectively invest in capital assets.

4. Acquisition by an investor owned utility. Milburn District did not provide any evidence in the record that it has been approached by any investor owned utility to purchase it, or that it has approached an investor owned utility to acquire Milburn District.

5. Merger of Milburn District with Graves District. Graves District has stated its opposition to a consolidation of Milburn District into Graves District, citing its perception that Carlisle County elected officials appear unwilling to devote resources to improving Milburn District facilities, Graves District's assessment of capital investments that are needed for Milburn District to become an acceptable merger candidate, Graves District's view that Graves District customers should not share a cost structure with ratepayers who live in a different county, as well as concerns about the governance structure of a merged district.⁷⁷ Commission Staff did not analyze each previous merger transaction in the Commonwealth to assess cost differentials among merged systems but observes that consolidations of equals are not the norm. Commission Staff did perform a basic unit cost and water loss analysis for the legacy systems that formed Graves District as well as for each subsequent consolidation which is shown in Figure 9. It notes that disparities existed for both unit cost and water loss, yet the systems still merged, and Graves District unified its rate structure for the systems in 2019.⁷⁸

⁷⁷ Graves District's Response to Staff's First Request, Item A-3.

⁷⁸ Case No. 2018-00429, Sept. 30, 2019 Order.

Figure 9
Selected Cost Information - Merged Graves District Entities

Description	Operating Expenses	Gallons Sold	Unit Cost	Water Loss Percent	Customers	Avg. Gallons Per Customer Per Month
<i>Legacy Graves Districts (2007)</i>						
Consumers	\$ 444,831	99,650	\$ 4.46	8.8633%	1,669	4,976
Hardeman	114,994	23,463	\$ 4.90	2.7813%	336	5,819
Fancy Farm	189,053	35,850	\$ 5.27	8.3007%	435	6,868
South Graves	256,076	33,562	\$ 7.63	31.9081%	670	4,174
Total	\$ 1,004,954	192,525	\$ 5.22		3,110	5,159
<i>2012 Pre-Merger</i>						
Hickory	555,601	123,503	\$ 4.50	22.8350%	1,336	7,704
Graves	\$ 1,298,919	193,396	\$ 6.72	20.1910%	4,851	3,322
Total	\$ 1,854,520	316,899	\$ 5.85		6,187	4,268
<i>2015 Pre-Merger</i>						
Graves	\$ 1,675,834	335,613	\$ 4.99	25.5409%	5,133	5,449
Sedalia	56,672	6,783	\$ 8.36	12.8597%	142	3,981
Total	\$ 1,732,506	342,396	\$ 5.06		5,275	5,409

The evidence in the record supports that Graves District demonstrates by its highly capable staffing structure via its management agreement with the City of Mayfield, its size, financial stability, capital and water loss management initiatives, and experience with utility consolidations, that it is well qualified to consolidate with Milburn District and support its customers.

Commission Staff further recommends that the Commission consider alternative rate structures to mitigate the near term (5 to 7 years) effects of Milburn District's higher cost structure on consolidated rates. Additionally, it recommends that either Graves District's current water loss surcharge of \$5.00 per customer per month be expanded to include Milburn District's customers or that a capital investment surcharge be applied to Milburn District customers for a period of time to fund some portion of its capital requirements.

In the event of a merger transaction, Commission Staff also recommends that Graves District pursue potential funding opportunities that could be made available under KRS 224A.304, previously described, as a means to facilitate the transaction.

Consolidated Financial Overview

Appendix B presents a pro forma consolidating operating cost summary based on reported 2022 audited financial statements for Graves District and the 2022 annual report filed with PSC (unaudited) for Milburn District and is not intended to present a revenue requirement for ratemaking purposes. Water loss surcharge revenue and surcharge funded expenses for Graves District are also excluded from the analysis.

The proposed merger does not contemplate any actions that Graves District might take in how the legacy Milburn District is operated. However, a material change in cost to operate Milburn District is not anticipated. Customer count would increase by 125, or 2.58 percent. Allocated costs from MEWS to Graves District would theoretically increase by the same amount, subject to the unique maintenance needs of the Milburn District system given that its equipment is substantially at the end of its useful life. While there could be an increase in audit costs in the first year subsequent to a merger, ongoing costs should not be materially affected. Commission Staff does not consider Milburn District's not having been audited to be an issue for Graves District's audit as Milburn District's equity is minimal and its fixed assets net book value is near zero, after adjustment for an item discussed in the Milburn District analysis previously discussed.

Figure 9 below provides an operating cost summary converted to a cost per thousand gallons of water sold. Debt service is not consolidated because Graves District and the legacy Milburn District would retain their respective capital debt components until

the amounts are extinguished.⁷⁹ Incremental capital costs to support Graves District's assessment of Milburn District's immediate capital needs are also not a component of the analysis as neither the ultimate necessity of each item nor funding types have been determined. The analysis projects that, based on current costs, the consolidated unit operating cost per thousand gallons would be \$0.23 higher than Graves District's current costs and \$4.27 lower than Milburn District's current costs.

Figure 9
Shared Cost Summary (1)

Description	Milburn	Graves	Total	Eliminating Entries (2)	Pro-Forma
<i>Unit Calculations</i>					
Common Operating Costs	\$ 63,080	\$ 2,215,325	\$ 2,278,405	\$ (25,430)	\$ 2,252,975
Debt Service	\$ 4,878	\$ 142,724	\$ 147,602	\$ -	\$ 147,602
Gallons Sold	4,982	271,552	276,534	(7,947)	268,587
<i>Cost Per Thousand Gallons</i>					
Average Common Cost Per Thousand	<u>\$ 12.66</u>	<u>\$ 8.16</u>	<u>\$ 8.24</u>		<u>\$ 8.39</u>
Average Common Cost Per 4,000 Gallons	<u>\$ 50.64</u>	<u>\$ 32.64</u>	<u>\$ 32.96</u>		<u>\$ 33.56</u>
Cost Per 1,000 Difference vs. Pro-Forma	<u>\$ 4.27</u>	<u>\$ (0.23)</u>			

(1) This is for cost comparison only. The rate structure would be determined based on evidence presented during a hearing and the Commission's final order.

(2) Milburn District water cost of \$25,430 for purchases from Graves District and Graves District gallons sold to Milburn District are eliminated in consolidation.

⁷⁹ KRS 74.363(4) states in part that "[b]onded obligations of any district. . . secured by the revenue of the systems . . . shall continue to be retired . . . from funds collected over the same area by the new board of commissioners ..."

Signatures

/s/ Jeff Abshire

Prepared by: Jeff Abshire
Revenue Requirements Branch
Division of Financial Analysis

/s Noah Abner

Prepared by: Noah Abner
Revenue Requirements Branch
Division of Financial Analysis

APPENDIX A

APPENDIX TO COMMISSION FEASIBILITY STUDY OF THE KENTUCKY
PUBLIC SERVICE COMMISSION IN CASE NO. 2021-00341 DATED MAY 31 2024

RECENT WATER SYSTEMS CONSOLIDATIONS IN KENTUCKY

Acquirer	Acquirer Type	Acquired System	Acquired System Type	# of Customers Acquired	Case No
Benton, City of	Municipal	West Marshall WD	District	243	1998-00296
Carrollton, City of	District	West Carroll Water District	District	982	2021-00155
Daviess County WD	District	Southeast Daviess Water District (7,603), West Daviess Water District (5,342)	District	12,945	2020-00287
Graves County WD	District	Consumers	District	1,669	2007-00496
Graves County WD	District	Fancy Harm	District	436	2007-00496
Graves County WD	District	Hardeman	District	336	2007-00496
Graves County WD	District	South Graves	District	670	2007-00496
Graves County WD	District	Hickory	District	1,376	2012-00358
Graves County WD	District	Sedalia	District	142	2015-00296
Grayson County Water District	District	Caneyville, City of	Municipal	774	2021-00387
Hardin, City of	Municipal	South Marshall WD	District	not available	10269
Jonathan Creek WD	District	Jonathan Creek WA	Association	not available	1992-00300
Kevil, City of	Municipal	Bandana (Ballard County)	District	92	2001-0051
KY Amer	Investor Owned	Eastern Rockcastle WA	Association	610	2017-00383
Larue County Water District	District	New Haven, City of	Municipal	591	2022-00207
Murray, City of	Municipal	Murray #1 WD	District	490	1998-00075
Murray, City of	Municipal	Murray #2 WD	District	316	2014-00291
Murray, City of	Municipal	Murray #2 WD	District	290	2019-00413
Paducah Water	Municipal	Massac WA	District	402	19010104
Paducah Water	Municipal	Lone Oak WD	District	not available	19010192
Paducah Water	Municipal	Reidland WD	District	2,950	1999-00348
Paducah Water	Municipal	Hendron WD	District	2,729	2012-00156
Paducah Water	Municipal	West McCracken County WD	District	1,570	2021-00374
KY Amer	Investor Owned	Millersburg	Municipal	500	Non-jurisdictional
KY Amer	Investor Owned	North Middletown	Municipal	400	Non-jurisdictional

APPENDIX B

APPENDIX TO COMMISSION FEASIBILITY STUDY OF THE KENTUCKY
PUBLIC SERVICE COMMISSION IN CASE NO. 2021-00341 DATED MAY 31 2024

PRO FORMA 2022 CONSOLIDATING OPERATING COST SUMMARY

Description / Year	Milburn District	Graves District	Total	Impacts	Pro-Forma
<i>Operating Expenses</i>					
Purchased Water	\$ 25,430	\$ 361,579	\$ 387,009	\$ (25,430)	\$ 361,579
Other Expenses	34,964	1,678,242	1,713,206		1,713,206
Depreciation	2,686	336,786	339,472		339,472
Taxes Other Than Income	0	6,399	6,399		6,399
Pro Forma : Water Loss Surcharge Expenses	0	(165,495)	(165,495)		(165,495)
Total Expenses	63,080	2,217,511	2,280,591	(25,430)	2,255,161
<i>Other Traditional Income / (Expense) Items</i>					
Interest Income ()	0	(2,186)	(2,186)		(2,186)
Other Income / (Expense)	0	(2,186)	(2,186)	0	(2,186)
Common Costs (excluding Water Loss Surcharge)	\$ 63,080	\$ 2,215,325	\$ 2,278,405	\$ (25,430)	\$ 2,252,975

APPENDIX C

APPENDIX TO COMMISSION FEASIBILITY STUDY OF THE KENTUCKY
PUBLIC SERVICE COMMISSION IN CASE NO. 2021-00341 DATED MAY 31 2024

MILBURN WATER DISTRICT SELECTED FIXED ASSET DETAILS
CASE NO. 2018-00314

Acct	#	Description	Date	Cost	Life	Depreciation Left
303	7	Limited term l	1/1/1976	1191	43	0.000
304	26	#304 tower pa	3/1/1999	45208	15	0.000
304		Paint tower	7/1/2006	22405	43	16152.000
304		meter lines	7/1/2006	7525	43	5425.000
304	38	Tower Paint Id	7/14/2014	19900	10	11940.000
330	1	Dist Reservoir	1/1/1972	46414	43	0.000
331	6	Transmission l	1/1/1972	113776	43	0.000
334	3	Meter and Ins	1/1/1972	15417	43	0.000
334	8	new meters	2/2/1992	521	15	0.000
334	9	9 new meters	8/20/1992	1396	15	0.000
334	10	15 new meter	1/29/1993	560	15	0.000
334	12	new meters	12/3/1993	1031	15	0.000
334	14	10 new meter	4/5/1994	335	10	0.000
334	18	10 new meter	10/18/1994	330	10	0.000
334	19	new meters	9/13/1995	763	10	0.000
334	22	6 new meters	2/11/1997	500	10	0.000
334	23	6 new meters	8/29/1997	500	10	0.000
334	24	10 new meter	5/5/1998	450	10	0.000
334	29	10 new meter	3/12/2001	741	7	0.000
334	30	3 new meters	5/31/2001	155	7	0.000
334	33	7 new meters	9/3/2002	152	7	0.000
334	34	12 new meter	2/23/2005	414	7	0.000
334	35	new meters	6/9/2005	743	7	0.000
334	36	5 new meters	10/5/2005	330	7	0.000
334	38	meters	12/1/2014	2577	7	962.440
334	37	meters	12/31/2006	370	7	0.000
335	2	Hydrants	10/1/1972	1883	43	0.000
339	5	Misc Equipme	10/1/1972	752	43	0.000
340	4	Office Furnitu	10/1/1972	119	43	-0.070
340	15	Computer pri	6/3/1994	310	7	0.000
340	16	Computer des	7/30/1994	265	7	0.000
340	17	Computer inst	9/1/1994	800	7	0.000
340	27	deskjet printe	1/10/2001	151	3	0.000
340	28	Computer pro	3/10/2001	1695	5	0.000
340	11	dickson press	8/23/1993	325	10	0.000
340	20	dickson press	3/26/1996	349	5	0.000
340	31	dickson press	7/9/2001	408	5	0.000
340	37	Computer	1/31/2005	1364	7	0.000
340		Computer	6/20/2006	1374	7	0.000
348	13	old fire dept b	3/15/1994	2000	20	0.000
348	21	fire dept bldg	6/28/1996	775	20	0.000
348		Water Buildin	2/1/2011	3500	15	1868.000

299774

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