

The Commission also notes that it is unclear whether expenses for certain vendors identified as Management Consulting vendors in historical periods were included elsewhere in the SG&A budget. As noted above, Bluegrass Water indicated that vendors provided “Legal and Regulatory Consulting,” “Accounting Support,” and “Environmental Consulting.” However, the SG&A budget for the forecast period includes separate line items for Legal Fees, Auditor and Accounting Services, and Engineering Consulting, which would seem to cover similar services. Bluegrass Water also included expense for Starnik Systems, Inc., which provided IT services, as a Management Consulting expense in 2019, but also included a line item in the SG&A budget explicitly for IT expenses.

The Commission finds that CSWR did not establish that the Management Consulting vendors provide services for which costs should be allocated to Bluegrass Water’s customers. Thus, the Commission finds that the total amount should be disallowed and has, therefore, reduced CSWR’s forecast period Management Consulting Expense in the SG&A budget by \$243,000.

3. Summary of Allocated Overhead Adjustment

The table below reflects the adjustments to the SG&A budget discussed above before business development expense is removed and the SG&A budget is allocated among CSWR’s systems.

Admin & Human Resources	\$	4,944,106
Office Supplies and Travel Expense		106,271
Management Consulting		--
Engineering Consulting		20,400
Auditor & Accounting Services		133,000
Legal Fees		87,684
IT		238,250
Rent		168,000

Insurance		77,000
Miscellaneous		6,000
Total Corporate SG&A	\$	5,780,711

Application of the sharing percentage discussed above for the allocation of business development expense reduces the SG&A budget to be allocated among CSWR's utilities to \$3,837,897.<sup>243</sup> Application of the sharing percentage discussed above for the allocation of the SG&A budget among CSWR's utilities results in overhead to be allocated to Bluegrass Water of \$191,136. However, as noted above, the Commission found that travel expense of \$11,392 should be allocated directly. Thus, the Commission finds that overhead allocated to Kentucky should be \$202,519.

In its application, Bluegrass Water projected \$335,961 in allocated overhead for the forecasted test year, of which it allocated \$292,902 to its sewer operations, including the 00297 systems, and \$43,059 to its water operations based on the customer counts of those systems.<sup>244</sup> For the reasons discussed above, the Commission finds that the total allocated overhead should be reduced to \$202,519 in the forecasted period, of which \$176,909 would be allocated to sewer operations and \$25,610 would be allocated to

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Total Adjusted Corporate SG&A	\$	5,780,711
Multiply By: BD Percentage		33.61%
Allocated BD		<u>1,942,814</u>
Total Adjusted Corporate SG&A		5,780,711
Subtract: Allocated BD		<u>1,942,814</u>
Allocatable Corporate SG&A	\$	<u><u>3,837,897</u></u>

<sup>244</sup> See Response to Staff's First Request, Item 1, BGUOC2020RateCase-Schedule\_OHA1.xlsx.

water operations using Bluegrass Water's allocation methodology.<sup>245</sup> Thus, the Commission finds that the allocated overhead for sewer operations in the forecasted test period should be reduced by \$115,993<sup>246</sup> and that the allocated overhead for water operations in the forecasted test period should be reduced by \$17,449.<sup>247</sup>

#### Adjustment to Remove 2020-00297 Systems

As noted above, the Commission finds that the revenues and costs associated with the 00297 systems should be eliminated when calculating rates and the revenue requirement for the systems at issue here. As discussed above, when determining the rate base for the systems at issue in this case, the Commission did not include any of the elements of rate base for the 00297 systems, such that the return and any taxes on that return only included costs associated with the systems at issue in this case. Further, the Commission applied the depreciation rates discussed above to the rate base that did not include the 00297 systems such that depreciation expense for those systems was not included in the revenue requirement for the systems at issue in this matter.

With respect to sewer expenses or elements of the revenue requirement that were not tied to rate base, namely Bluegrass Water's operation and maintenance expense, the Commission allocated those amounts based on number of residential equivalents provided by Bluegrass Water.<sup>248</sup> The Commission notes that this is the method Bluegrass Water generally used to allocate such expenses when the Attorney General requested a

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<sup>245</sup> See BGUOC2020RateCase-Schedule\_OHA1.xlsx (showing Bluegrass Water's allocation methodology).

<sup>246</sup>  $\$292,902 - 176,909 = \$115,993$

<sup>247</sup>  $\$43,059 - \$25,610 = \$17,449$

<sup>248</sup> Appendix C.

breakdown of rates by system and that such an allocation method would essentially occur by default if the 00297 systems had been included in a unified rate. Moreover, the bulk of Bluegrass Water's expenses or projected expenses were incurred collectively such that they could not be allocated directly. Even operator costs, which is Bluegrass Water's largest expense and arguably could be broken out by contract (the 00297 systems are part of a single contract), are collective, at least in part, because as Bluegrass Water acknowledged at the hearing, the contract costs in the later contracts were lower than the earlier contracts due to the fact that the operator was already providing service to other Kentucky systems. Thus, the Commission finds that allocating the costs not associated with rate base using the customer equivalencies provided by Bluegrass Water is the most reasonable method.

In the forecasted test period, as filed with the application, Bluegrass Water included O&M expenses for sewer totaling \$2,049,424.<sup>249</sup> With the adjustments to Allocated Overhead and Administrative Services line items of the sewer O&M expense discussed above, the sewer O&M expenses were reduced to \$1,898,956. The sharing percentage for the 00297 systems based on the customer equivalent counts projected by Bluegrass Water would be 21.37 percent. Thus, removal of the O&M expenses attributable to the 00297 systems would further reduce the O&M expense for the systems at issue in this matter by \$405,421 to \$1,493,535 as follows:

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<sup>249</sup> Those costs were broken down as follows: Sewer Contractor Operations-\$1,029,348; Sewer Other Operations-\$310,377; Sewer Maintenance-\$112,008; Customer Billing Expense-\$75,237; Uncollectible Accounts-\$8,662; Allocated Overhead-\$292,902; Administrative Services-\$41,122; Property Insurance-\$172,604; Regulatory Expense-\$9,230, and PSC Assessment \$841.00. Response to Staff's First Request, Item 1, BGUOC2020RateCase-IncomeStatement\_(Sewer).xlsx, Tab Inc Statement – SCH C.1.

<u>Category</u>	<u>Sewer O&amp;M- Application</u>	<u>00297 O&amp;M</u>	<u>O&amp;M Systems at Issue</u>
Sewer - Contract Operations	\$1,029,348	\$219,972	\$809,376
Sewer - Other Operations	310,377	66,328	244,049
Sewer - Maintenance	112,008	23,936	88,072
Customer Billing Expense	75,237	16,078	59,159
Uncollectible Accounts	8,662	1,851	6,811
Allocated Overhead	176,909	37,806	139,103
Administrative Services	5,672	1,212	4,460
Property Insurance	172,604	36,886	135,718
Regulatory Expense	6,322	1,351	4,971
PSC Assessment	841	(975)	1816
Total O&M Expenses (Sum of Lines 9-32):	\$1,898,956	\$405,421	\$1,493,535

Uncollectible Accounts.

Applying an uncollectible rate of 0.75 percent to the sewer operating revenues of \$908,166 results in a pro forma Uncollectible expense for the sewer division of \$6,811. Applying the uncollectible rate to the water operating revenues of \$90,000 results in a pro forma Uncollectible expense of \$675 for the water division.

Public Service Commission (PSC) Assessment.

Applying the Commissions assessment rate of rate of 0.20 percent to the sewer operating revenues of \$908,166 results in a pro forma PSC Assessment expense for the sewer division of \$1,816, which is \$975 above the forecasted test-year amount. Applying

the Commissions assessment rate to the water operating revenues of \$90,000 results in a pro forma PSC Assessment expense of \$180 for the water division.

### Interest Synchronization Expense

In its calculation of income tax expense for the sewer division the Commission has included interest expense of \$78,052,<sup>250</sup> based on Bluegrass Water's capital structure, the weighted cost of debt<sup>251</sup> and Bluegrass Water's Rate Base. In its calculation of income tax expense for the sewer division the Commission has included interest expense of \$16,899.<sup>252</sup>

### Income Tax Expense

Using the pro forma operating revenues and expenses for the sewer division determined reasonable herein, the Commission arrives at its pro forma federal income tax expense of (\$113,889), and state income tax expense of (\$28,543). The table below is the Commission's calculation of pro forma income tax expense:

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<sup>250</sup> \$2,601,721 (Rate Base - Sewer) x 3.00% (Weighted Cost of Capital) = \$78,052.

<sup>251</sup> 6% (Long-Term Debt Rate) x 50% (Debt Percentage = 3% (weighted Cost of Debt).

<sup>252</sup> \$562,971 (Rate Base - Water) x 3.00% (Weighted Cost of Capital) = \$16,889.

	Income Tax - Sewer	
	State	Federal
Operating Revenues	\$ 908,166	\$ 908,166
Operating Expenses:		
Operation & Maintenance Exp.	1,493,535	1,493,535
Depreciation	49,697	49,697
General Taxes	13,856	13,856
State Income Taxes	0	(28,543)
Interest Expense	(78,052)	(78,052)
 Total Operating Expenses Before Income Taxes	 1,479,035	 1,450,492
 Taxable Income	 (570,869)	 (542,326)
Multiplied by: Tax Rates	5%	21%
 State and Federal Income Taxes	 \$ (28,543)	 \$ (113,889)

Using the pro forma operating revenues and expenses for the water division determined reasonable herein, the Commission arrives at a pro forma federal income tax expense of (\$25,037), and state income tax expense of (\$6,275). The table below is the Commission's calculation of pro forma income tax expense:

	Income Tax - Water	
	State	Federal
Operating Revenues	\$ 90,000	\$ 90,000
Operating Expenses:		
Operation & Maintenance Exp.	207,125	207,125
Depreciation	(8,607)	(8,607)
General Taxes	92	92
State Income Taxes	0	(6,275)
Interest Expense	16,889	16,889
 Total Operating Expenses Before Income Taxes	 215,499	 209,224
 Taxable Income	 (125,499)	 (119,224)
Multiplied by: Tax Rates	5%	21%
 State and Federal Income Taxes	 \$ (6,275)	 \$ (25,037)

PRO FORMA ADJUSTMENTS SUMMARY

The effect of the Commission’s adjustments on Bluegrass Water’s pro forma test-period operations for the sewer division is below. The chart in Appendix E, attached to this Order, is a detailed water pro forma Income Statement that shows the effect of the Commission’s adjustments along with the proposed and accepted adjustments of Bluegrass Water for its sewer division.

Sewer Division			
	Bluegrass Water's Forecasted Test Year	Commission Accepted Adjustments	Commission Adjusted Test Year
Operating Revenues	\$ 1,154,988	\$ (246,822)	\$ 908,166
Operating Expenses	2,331,141	(916,486)	1,414,654
Net Operating Income	\$ (1,176,153)	\$ 669,664	\$ (506,488)

The effect of the Commission’s adjustments on Bluegrass Water’s pro forma test-period operations for the water division is below. The chart in Appendix F, attached to this Order, is a detailed water pro forma Income Statement that shows the effect of the Commission’s adjustments along with the proposed and accepted adjustments of Bluegrass Water for its water division.

Water Division			
	Bluegrass Water's Forecasted Test Year	Commission Accepted Adjustments	Commission Adjusted Test Year
Operating Revenues	\$ 90,000	\$ -	\$ 90,000
Operating Expenses	286,047	(75,031)	211,016
Net Operating Income	\$ (196,047)	\$ 75,031	\$ (121,016)

RATE OF RETURN



## Capital Structure

Bluegrass Water proposes a hypothetical capital structure consisting of 50 percent equity and 50 percent long-term debt. The actual capital structure currently approximates 100 percent equity.<sup>253</sup> Bluegrass Water's witness, Jennifer E. Nelson, states that the current capital structure deviates from standard utility practice as it is disproportionately leveraged in favor of equity.<sup>254</sup> She continues stating that the proposed hypothetical capital structure is within industry norms and investor requirements.<sup>255</sup> She avers that although the proposed capital structure is slightly more leveraged than the proxy groups, the proposed hypothetical capital components fall within the proxy group common equity ratios which range from 43.13 percent to 67.12 percent and a mean of 55.23 percent.<sup>256</sup> Additionally, Ms. Nelson notes that the proposed hypothetical capital structure supports the proposed capital structure approved in the acquisition of several assets in Case Nos. 2019-000104 and 2019-00360.<sup>257</sup> Neither the Attorney General nor the Joint Intervenors filed comments regarding the proposed capital structure debt to equity ratios.

The Commission agrees with Ms. Nelson that the current capital structure deviates from standard utility practices and is inappropriate for ratemaking purposes. As noted by Ms. Nelson, David Parcell's text, the *Cost of Capital Manual*, states that there are circumstances where a hypothetical capital structure is used for a utility such as when the

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<sup>253</sup> Direct Testimony of Jennifer E. Nelson, (Nelson Testimony) at 5.

<sup>254</sup> Nelson Testimony at 5.

<sup>255</sup> Nelson Testimony at 7.

<sup>256</sup> Nelson Testimony at 8.

<sup>257</sup> Nelson Testimony at 7.

current capital structure is deemed substantially different from the typical.<sup>258</sup> Ms. Nelson further notes that in *The Regulation of Public Utilities* by Charles F. Phillip, a hypothetical capital structure is used only when the utility's actual capitalization is clearly out of line as compared to others.<sup>259</sup> Clearly a capital structure that approximates 100 percent equity is not typical nor reasonable. Therefore the Commission finds that a hypothetical capital structure consisting of 50 percent long-term debt and 50 percent equity to be reasonable.

### Long-Term Debt Rate

As a component to the hypothetical proposed capital structure, Bluegrass Water proposed a long-term debt rate of 9.50 percent. Ms. Nelson based this debt rate upon the midpoint of then current financing negotiations where the rate was expected to be in the range of 9.00 and 10.00 percent.<sup>260</sup> Ms. Nelson supported a long-term debt rate of 9.50 percent stating that it was reasonable based upon her analysis of the yield curve data on B-rated and CCC-rated utility debt.<sup>261</sup> Ms. Nelson stated that B-rated and CCC-rated utility debt yields are close proxies as they reflect higher risk, below-investment grade utility debt rate costs. As of September 23, 2020, these below-investment grade utility debt yields were in the range of 8.84 to 11.70 percent for terms of 15 years or more. As of January 19, 2021, the range had decreased to 8.42 to 10.63 percent<sup>262</sup> and as of

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<sup>258</sup> Nelson Testimony at 6.

<sup>259</sup> Nelson Testimony at 6–7.

<sup>260</sup> Nelson Testimony at 9.

<sup>261</sup> Nelson Testimony at 9.

<sup>262</sup> Bluegrass Water's Response to Staff's First Request for Information, Item 53.

May 16, 2021, the range had increased, but was still below the range at filing of 8.49 to 11.33 percent.<sup>263</sup>

Bluegrass Water filed notice of financing in Case No. 2021-00128 on March 8, 2021.<sup>264</sup> On April 13, 2021, Bluegrass Water filed a status update in Case No. 2021-00128 and the instant case. In this update, Bluegrass Water stated that due to the Commission's March 24, 2021 Order affirming its decision that any rate adjustment would not include the four systems Bluegrass Water had been approved to acquire in Case No. 2020-00297, the lender was reassessing the situation. Bluegrass Water contends that the reasoning for this reassessment is that even if the current rate case is successful, Bluegrass Water will be in a negative net cash flow position due to the additional acquisitions.<sup>265</sup> Bluegrass Water noted that it was approaching other lenders, but has had indications that financing would not be available due to the impact of the exclusion decision.<sup>266</sup> At the hearing, Mr. Cox stated that Bluegrass Water was working with a St. Louis-based lender and was negotiating financing at a debt rate of 6.00 percent and expected to file with the Commission in the next 20–30 days.<sup>267</sup>

The Attorney General asked that the Commission set a long-term debt rate which accurately reflects current market conditions.<sup>268</sup> The Attorney General notes that Ms.

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<sup>263</sup> BW Hearing Exhibit. 01 filed May 21, 2021.

<sup>264</sup> Case No. 2021-00128, *Electronic Application of Bluegrass Water Utility Operating Company, LLC for Approval of Financing Pursuant to KRS 278:300*, (filed Mar. 8, 2021) Notice.

<sup>265</sup> Case No. 2021-00128, (filed April 13, 2021) Notice: re Status of Proposed Application.

<sup>266</sup> *Id.*

<sup>267</sup> May 19, 2021 H.V.T. at 9:35.

<sup>268</sup> Post-Hearing Brief of the Attorney General at 7.

Nelson's argument that the proposed 9.50 percent long-term debt rate was supported by the argument that the distressed nature of the systems increases the cost of debt is no longer relevant due to the many system improvements illustrated in the video shown by Bluegrass Water at the beginning of the Hearing.<sup>269</sup>

The Joint Intervenors also argued against the proposed 9.50 percent long-debt rate noting that the testimony at the hearing demonstrated that the rate environment for debt has improved since the application filing.<sup>270</sup> The Joint Intervenors supported this position by noting that Bluegrass Water agreed that interest rates for similar situated CCC-rated companies were between 6.00 and 6.97 percent.<sup>271</sup>

Bluegrass Water responded that piecemeal updates, such as to the long-term debt rate, fail to uniformly follow applicable principles.<sup>272</sup> In support of this argument, Bluegrass Water stated that it complied with the law when utilizing a forward-looking test period and updates and/or modifications violate principles of KRS 278.192.<sup>273</sup> Bluegrass Water contends that it provided a full and accurate application in support of the requested rates and not pieces here and there that fail to provide support of the application in full and selecting updates of certain elements upsets the balance contemplated by guidelines used for a forecasted test period.<sup>274</sup> Bluegrass Water maintains that a 9.50 percent long-

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<sup>269</sup> *Id.*

<sup>270</sup> Post-Hearing Brief of Joint Intervenors at 16.

<sup>271</sup> Post-Hearing Brief of Joint Intervenors at 16.

<sup>272</sup> Post-Hearing Response Brief of Bluegrass Water at 7.

<sup>273</sup> Post-Hearing Response Brief of Bluegrass Water at 7.

<sup>274</sup> Post-Hearing Response Brief of Bluegrass Water at 8.

term debt rate reflects the risks associated with small, distressed utilities that have difficulty attracting traditional financing and should not be altered to reflect a lower amount due to perceived fluctuations in the market.<sup>275</sup>

The Commission finds that the rate represented by Mr. Cox of 6.00 percent to be reasonable. The Commission agrees that higher risk utility bonds can be used as a gauge for the determination of the long-term debt rate, but when determining a proxy for the long-term debt rate, the Commission must also assess the current lending market, the regulatory environment, and other comparable investments. Current rates for BBB and CCC rated corporate bonds are 2.410 and 6.974 percent, respectively.<sup>276</sup> These BBB and CCC rated corporate bonds are often referred to as junk bonds or a non-investment grade high risk security. Bluegrass Water's expert, Mr. Dylan D'Ascendis, agreed that utility bonds are issued in a regulated world, hence carry less risk than a low rated corporate bond and thus typically have a lower yield.<sup>277</sup> The Commission-approved 6.00 recognizes the additional risk associated with Bluegrass Water as the 6.00 percent is within the upper range of similar high-risk corporate investments.<sup>278</sup> Further, with a long-term debt rate of 6.00 percent, the Commission recognizes the additional risk of Bluegrass Water as compared to larger utilities in that the rate is greater than the

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<sup>275</sup> Post-Hearing Response Brief of Bluegrass Water at 8.

<sup>276</sup> See May 19, 2021 H.V.T. at 13:50:00 (displaying and discussing bond rates reported by the Wallstreet Journal on May 18, 2021).

<sup>277</sup> May 19, 2021 H.V.T. at 13:30:00.

<sup>278</sup> May 19, 2021 H.V.T. at 14:00:00.

Commission's most recently approved long-term debt rate of 3.89 percent<sup>279</sup> and current forecasted filings of 4.16 percent<sup>280</sup> and 4.04.<sup>281</sup>

### Return on Equity (ROE)

Bluegrass Water proposed a ROE of 11.80 percent. Mr. D'Ascendis' models included the discounted cash flow model (DCF), two risk premium models (RPM), a capital asset pricing model (CAPM), and a comparison of common equity cost rates for a proxy group of domestic, non-price regulated companies based upon the DCF, RPM, and CAPM. Using a proxy group of seven water utilities and forecasted interest rates, the proposed range of equity cost rates were 9.74 to 10.41 percent. Mr. D'Ascendis then applied a business risk adjustment of 1.75% increasing the proposed range to 11.49 percent to 12.16 percent.

In D'Ascendis' evaluation of the capital market, he emphasized that the COVID-19 pandemic has increased risk due to the uncertainty surrounding the full impact and duration of the pandemic.<sup>282</sup> He continued, stating that the increased volatility in the market is the cause of lower bond prices, as opposed to the low interest rate environment, and this same market volatility is contributing to investor's "flight to safety" which creates

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<sup>279</sup> Case No. 2020-00174, *Electronic Application of Kentucky Power Company for (1) A General Adjustment of Its Rates for Electric Service; (2) Approval of Tariffs and Riders; (3) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; (4) Approval of a Certificate of Public Convenience and Necessity; and (5) All Other Required Approvals and Relief* (Ky. PSC Jan. 13, 2021) at 40.

<sup>280</sup> Case No. 2020-00349, *Electronic Application of Kentucky Utilities Company for an Adjustment of Its Electric Rates, a Certificate of Public Convenience and Necessity to Deploy Advanced Metering Infrastructure, Approval of Certain Regulatory and Accounting Treatments, and Establishment of a One-year Surcredit* (filed Nov. 25, 2020), Application, Direct Testimony of Daniel K. Arbough at 23.

<sup>281</sup> Case No. 2020-00350, *Electronic Application of Louisville Gas and Electric Company for an Adjustment of Its Electric Rates, a Certificate of Public Convenience and Necessity to Deploy Advanced Metering Infrastructure, Approval of Certain Regulatory and Accounting Treatments, and Establishment of a One-year Surcredit* (filed Nov. 25, 2020), Application, Direct Testimony of Daniel K. Arbough at 24.

<sup>282</sup> Direct Testimony of Dylan W. D'Ascendis (D'Ascendis Testimony) at 7.

a situation where utilities are traded similar to the S&P 500 and increase Beta coefficients and investor-required returns.<sup>283</sup> The proposed business risk model is akin to a size premium adjustment and D'Ascendis recommended it based upon Bluegrass Water's size relative to the proxy group.<sup>284</sup> D'Ascendis argued that smaller companies are generally more risky as they face more exposure to business cycles and economic conditions.<sup>285</sup>

Below is a summary of D'Ascendis's models:<sup>286</sup>

**Table 1: Summary of Common Equity Cost Rate**

	<u>Utility Proxy Group</u>
Discounted Cash Flow Model	9.07%
Risk Premium Model	10.88%
Capital Asset Pricing Model	10.96%
Cost of Equity Models Applied to Non-Price Regulated Proxy Group	<u>10.71%</u>
Indicated Range of Common Equity Cost Rates before Adjustment	9.74% - 10.41%
Business Risk Adjustment	1.75%
Indicated Range of Common Equity Cost Rates after Adjustment	<u>11.49% - 12.16%</u>
Recommended Common Equity Cost Rate	<u>11.80%</u>

The Attorney General asked that the Commission refrain from awarding Bluegrass Water a ROE of 11.80 percent and instead set a ROE reflective of current market conditions.<sup>287</sup> The Attorney General argued that the proposed ROE was significantly

<sup>283</sup> D'Ascendis Testimony at 7.

<sup>284</sup> Bluegrass Water's Response to Staff's First Request for Information, Item 45.

<sup>285</sup> D'Ascendis Testimony at 46.

<sup>286</sup> D'Ascendis Testimony at 6.

<sup>287</sup> Post-Hearing Brief of the Attorney General at 5.

higher than the model results, specifically the DCF results of 9.07.<sup>288</sup> The Attorney General noted that the reason for the proposed business risk adjustment of 1.75 percent was business and financial risk and should be disregarded. Regarding business risk, the Attorney General argued that this proposed adjustment ignores that fact that the proxy group utilities face similar legal and regulatory environmental risks and as such, returns associated with business risk are already embedded within the proxy group.<sup>289</sup> He continued, noting that D'Ascendis' arguments regarding regulatory risk were centered around water utilities and not wastewater utilities and thus not applicable since all but one of the systems Bluegrass Water currently operates are wastewater.<sup>290</sup> Finally, the Attorney General argues that D'Ascendis' reasoning that Bluegrass Water's sheer size justifies such an adjustment is not warranted.<sup>291</sup> The Attorney General encouraged the Commission to consider the fact that although Bluegrass Water itself is small, but the parent company is not, and, when setting an appropriate rate of return, the Commission should consider the true scope of the company's operations not simply the capitalization of the relatively new venture in the Commonwealth.<sup>292</sup>

The Joint Intervenors also oppose the proposed business adjustment risk adjustment. They argued that Bluegrass Water has failed to demonstrate that such a premium is necessary to attract investment noting that, to date, Bluegrass Water has not

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<sup>288</sup> Post-Hearing Brief of the Attorney General at 5.

<sup>289</sup> Post-Hearing Brief of the Attorney General at 5.

<sup>290</sup> Post-Hearing Brief of the Attorney General at 5–6.

<sup>291</sup> Post-Hearing Brief of the Attorney General at 6.

<sup>292</sup> Post-Hearing Brief of the Attorney General at 6.



had an issue attracting equity as currently, even though the business plan indicates a loss for a period of time, the utility is fully capitalized.<sup>293</sup> The Joint Intervenors maintained that Bluegrass Water has no analysis to support its contention that its business is any more risky than other similarly situated companies in the market and noted that not only is its product essential but the fact since its customers are primarily residential in nature, a loss of a customer will not result in a significant financial impact.<sup>294</sup>

In response, Bluegrass Water continued its argument that selecting particular rate components, such as the ROE, should be avoided.<sup>295</sup> Bluegrass Water contends that the inclusion of the proposed business risk adjustment and the resulting proposed ROE of 11.80 percent is applicable to a utility such as Bluegrass Water due to its size and risk, such an ROE supported the market conditions when the application was filed and any adjustments in the market since the filing should not be considered.<sup>296</sup>

The Commission agrees that there is additional risk associated with Bluegrass Water, not necessarily because of its size but due to the fact that the utility has acquired small, failing systems that require capital improvements for both regulatory purposes and daily operations. However, a ROE of 11.80 percent is not reflective of the current market conditions. For example, an analysis of a small cap water utility in the April 2021 issue of *Value Line* indicates that in 2019 a ROE of 9.30 percent was earned and 9.90 percent

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<sup>293</sup> Post-Hearing Brief of Joint Intervenors at 16.

<sup>294</sup> Post-Hearing Brief of Joint Intervenors at 16.

<sup>295</sup> Post-Hearing Response Brief of Bluegrass Water at 9.

<sup>296</sup> Post-Hearing Response Brief of Bluegrass Water at 9.

in 2020;<sup>297</sup> and recent Commission awards, although for electric, have been 9.25<sup>298</sup> and 9.30 percent.<sup>299</sup> Further, a business risk or size adjustment has not been approved in the past and the Commission agrees with the Attorney General and the Joint Intervenors that the explicit inclusion is not reasonable as such an adjustment is arbitrary and inflates the model results. The Commission also notes that it does not support Mr. D'Ascendis' indicated range of common equity cost rates where he calculated the low end of the range by taking the average model result and averaging that with the lowest model results. The Commission believes that ignoring low end model results without support for the exclusion purposely inflates the model. Finally, the Commission rejects Bluegrass Water's argument that selecting components of the application and adjusting them violates the principles of a forecasted test year application. In each filed rate case, the Commission evaluates all components which comprise the overall revenue requirement and applies applicable adjustments for which the Commission deems reasonable and results in rates that are fair, just and reasonable.

The Commission finds that a ROE of 9.90 percent for Bluegrass Water to be reasonable in this matter. This ROE is within Bluegrass Water's own models as the

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<sup>297</sup> See Notice of Filing (Ky. PSC Jun. 8, 2021) (containing the relevant pages of The Value Line Investment Survey, Issue 9, Part 2, dated April 9, 2021); see also May 19, 2021 H.V.T. at 14:03:00 (where the pages were discussed at the hearing in confidential session).

<sup>298</sup> See Case No. 2019-00271, *Electronic Application of Duke Energy Kentucky, Inc. for 1) an Adjustment of the Electric Rates; 2) Approval of New tariffs; 3) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; and 4) All Other Required Approvals and Relief* (Ky. PSC April 29, 2020) at 46.

<sup>299</sup> See Case No. 2020-00174, *Electronic Application of Kentucky Power Company for (1) A General Adjustment of Its Rates for Electric Service; (2) Approval of Tariffs and Riders; (3) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; (4) Approval of a Certificate of Public Convenience and Necessity; and (5) All Other Required Approvals and Relief* (Ky. PSC Jan. 13, 2021) at 50.

results range from 9.07 to 10.96 percent. The approved ROE also recognizes the unique risk associated with Bluegrass Water's business model, as it is higher than recent awards, but is also reflective of the current economic environment. Much of Mr. D'Ascendis' argument for the proposed ROE range centers around the uncertainty surrounding the COVID-19 pandemic and the resulting volatility.<sup>300</sup> Since the application filing, market volatility, as measured by the VIX substantially leveled and in May 2021, was near the 30-year historical average.<sup>301</sup> Additionally, the uncertainty surrounding the COVID-19 pandemic has been tempered due to the vaccine roll out and the economy re-opening.

#### Rate of Return Summary

Applying the rates of 6.00 percent for long-term debt and 9.90 percent of common equity to the approved capitalization produces an overall cost of capital of 7.95 percent.

### REVENUE REQUIREMENTS

#### Authorized Increase - Sewer

The Commission finds that Bluegrass Water's net operating income for rate-making purposes is \$206,837. We further find that this level of net operating income requires an increase in forecasted present rate revenues of \$959,583.

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<sup>300</sup> D'Ascendis Testimony at 7–13; Bluegrass Water's Response to Staff's First Request, Item 38.

<sup>301</sup> See D'Ascendis' Testimony at 9, where the VIX has averaged 19.39 since 1990 and Bluegrass Water's Response to Staff's Post Hearing Data Request, Item 3 where the May 1, 2021 average monthly VIX was 20.31.

Net Investment Rate Base - Sewer	\$ 2,601,721
Multiplies by: Weighted Cost of Capital	<u>7.95%</u>
Operating Income Requirement	206,837
Less: Operating Income at Present Rates	<u>(506,488)</u>
Operating Income Deficiency	713,325
Multiplied by: Revenue Conversion Factor	<u>1.3452</u>
Increase in Revenue Requirement - Sewer	<u><u>\$ 959,583</u></u>

### Authorized Increase - Water

The Commission finds that Bluegrass Water's net operating income for rate-making purposes is \$44,756. We further find that this level of net operating income requires an increase in forecasted present rate revenues of \$223,001.

Net Investment Rate Base - Water	\$ 562,971
Multiplies by: Weighted Cost of Capital	<u>7.95%</u>
Operating Income Requirement	44,756
Less: Operating Income at Present Rates	<u>(121,016)</u>
Operating Income Deficiency	165,773
Multiplied by: Revenue Conversion Factor	<u>1.3452</u>
Increase in Revenue Requirement - Water	<u><u>\$ 223,001</u></u>

### Unified Rate

Bluegrass Water proposes a unified, monthly flat rate for all residential wastewater customers, multi-family, and commercial customers based on a residential equivalency of \$96.14, \$72.11, and \$240.36, respectively.<sup>302</sup> For its water customers, Bluegrass

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<sup>302</sup> Application Exhibit 3.

Water proposes to increase the current monthly flat rate from \$22.79 to \$105.84.<sup>303</sup> The proposed monthly flat rate design was adopted by Bluegrass Water as it mimics the rate design of the former individual systems it acquired.<sup>304</sup>

The Attorney General did not provide comments concerning the proposed unified monthly flat rate design but did request that such a large rate increase be phased in gradually to minimize rate shock.<sup>305</sup>

The Joint Intervenors argue that the proposed unified rate design for the wastewater customers creates unfair subsidization.<sup>306</sup> Customers of systems that need little or no capital expenditures to maintain proper service will subsidize the major repairs and rehabilitation of the distressed systems Bluegrass Water has acquired. The Joint Intervenors state that a unified rate may be an appropriate goal over time; however, it is unfair, unjust and unreasonable to move to a unified rate in a single proceeding.<sup>307</sup> The Joint Intervenors propose a limiting factor to the amount of any single system's capital expense can be shared with customers from other systems, which can then be revised in subsequent cases.<sup>308</sup> Bluegrass Water argues that eventually each of the systems will require significant capital investment; therefore, the customers are better served by the

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<sup>303</sup> *Id.*

<sup>304</sup> Application at 5.

<sup>305</sup> Post-Hearing Brief of Attorney General at 8.

<sup>306</sup> Post-Hearing Brief of Joint Intervenors at 17.

<sup>307</sup> *Id.*

<sup>308</sup> *Id.*

proposed unified rate.<sup>309</sup> Bluegrass Water states the proposed unified rate will allow for the financial burdens common to all systems to be distributed in a beneficial manner to each of the ratepayers, and allow the systems—which are historically distressed—to be brought into and kept in compliance and to continue providing safe and reliable service.<sup>310</sup> Bluegrass Water states that the Commission has consistently supported a unified rate structure to encourage consolidation of systems to improve the quality of service in the Commonwealth.<sup>311</sup>

The Commission supports the principle that utility rates should be cost based, and that in most circumstances each class of utility ratepayers should pay the costs which the utility incurs to provide that class with utility service. The majority of Bluegrass Water’s customers are in the residential class. A separate rate for each geographically distinct merged system of Bluegrass Water would create unreasonable and undue hardship to individuals in some areas served by Bluegrass Water. The Commission finds that the proposed unified monthly flat rate design, with wastewater multi-family dwellings and commercial customers monthly rates based on residential equivalency, should be approved for Bluegrass Water’s customers.

#### Nonrecurring Charges

The Commission has reviewed Bluegrass Water’s current and proposed Nonrecurring Charges for both the water operations and the sewer operations. Bluegrass

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<sup>309</sup> Cox Testimony at 72–73.

<sup>310</sup> Post-Hearing Response Brief of Bluegrass Water at 7.

<sup>311</sup> *Id.*

Water has not provided cost justification supporting the current charges or the proposed charges for either water operations or the sewer operations.<sup>312</sup> In support of these charges, Bluegrass Water states that the new Nonrecurring Charges are to recover costs incurred by Bluegrass Water. For the current Nonrecurring Charges, Bluegrass Water maintains that the previous utility instituted these and they do not know what cost justification was presented when the charges were established.<sup>313</sup> In addition, Bluegrass Water did not provide any forecasted occurrences for the current Nonrecurring Charges for water customers or proposed Nonrecurring Charges for sewers customers as requested.<sup>314</sup> Because no costs have been identified in support of these Nonrecurring Charges, the charges have been reduced to zero. If Bluegrass Water desires to charge Nonrecurring Charges in the future, Bluegrass Water should file a request through the Commission's Electronic Tariff Filing System and provide all cost justification and supporting documentation for these charges.<sup>315</sup>

### Tap Fees

Bluegrass Water proposed a Tap Fee for all of its sewer systems of \$750.00. Currently, Bluegrass Water charges Tap Fees for four sewer systems: Arcadia Pines, \$500.00; Great Oaks, \$750.00; Golden Acres, \$250.00; and Marshall Ridge, \$500.00. Bluegrass Water has a Water Tap Fee of \$350.00 and has not requested to adjust this fee in its application. Like the non-recurring charges, Bluegrass Water did not provide

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<sup>312</sup> Staff's Fourth Request for Information (filed Apr. 29, 2021), Items 1 and 3.

<sup>313</sup> Bluegrass Water's Response to the Commission Staff's Fourth Request for Information (filed May. 29, 2021), Items 1 and 3.

<sup>314</sup> *Id.*, Items 2 and 4.

<sup>315</sup> See, 807 KAR 5:011, Section 10.

cost justification for either the current Water Tap Fee or the proposed Sewer Tap Fee, and maintained that the proposed Tap Fees recover only a fraction of the costs incurred by Bluegrass Water.<sup>316</sup> The Commission finds that the proposed Sewer Tap Fee of \$750.00 should be denied; but, the current tariffed Water and Sewer Tap Fees should be allowed to continue to be charged. If Bluegrass Water desires to charge a unified Sewer Tap Fee, Bluegrass Water should file a request through the Commission's Electronic Tariff Filing System and provide all cost justification and supporting documentation.

### SUMMARY

The Commission, after consideration of the evidence of record and being otherwise sufficiently advised, finds that:

1. The rates set forth in Appendix B to this Order are the fair, just and reasonable rates for Bluegrass Water to charge for service rendered on and after the date of this Order.

2. The rate of return granted herein is fair, just and reasonable and will provide sufficient revenue for Bluegrass Water to meet its financial obligations with a reasonable amount remaining for equity growth.

3. The rates proposed by Bluegrass Water would produce revenue in excess of that found reasonable herein and should be denied.

IT IS THEREFORE ORDERED that:

1. Bluegrass Water's request for a declaratory order finding that the construction on Airview's wastewater treatment facility; the project to replace Brocklyn's wastewater treatment facility; construction on Delaplain's wastewater treatment facility;

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<sup>316</sup> *Id.*, Item 3.c.



construction on River Bluffs' wastewater treatment facility; and construction of the Mission monitoring systems is denied based on the Commission's finding that a CPCN is or was required for that construction.

2. The Commission, exercising its discretion pursuant to 807 KAR 5:001, Section 19(1), declines to make a specific finding regarding whether each additional construction item proposed by Bluegrass Water requires a CPCN and, therefore, denies Bluegrass Water's request for a declaratory order finding that those construction items do not require CPCN.

3. Bluegrass Water's request for a CPCN is granted with respect to the construction on Airview's wastewater treatment facility that has not been completed, and it is denied with respect to the construction that has been completed.

4. Bluegrass Water's request for a CPCN is denied with respect to the project to replace Brocklyn's wastewater treatment facility; construction on Delaplain's wastewater treatment facility; construction on River Bluffs' wastewater treatment facility; and construction of the Mission monitoring systems.

5. The rates and nonrecurring charges proposed by Bluegrass Water are denied.

6. The rates in Appendix B to this Order are approved for service rendered by Bluegrass Water on and after the August 1, 2021 for the systems at issue in this matter.

7. The rates of the 00297 systems shall continue to be charged in accordance with the tariffs sheets for those systems filed on or about April 5, 2021, until a subsequently filed tariff proposing to amend those rates is filed pursuant to KRS Chapter 278 and 807 KAR Chapter 5.

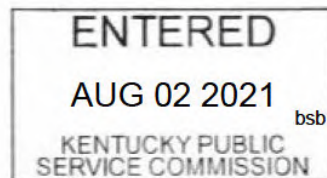
8. Within 20 days of the date of this Order, Bluegrass Water shall file with the Commission, using the Commission's Electronic Tariff Filing System, new tariff sheets setting forth the rates, charges, and revisions approved herein.

9. Bluegrass Water's March 22, 2021 motion for an enlargement of time to March 26, 2021, to respond to the Commission's Staff's Third Request for Information is granted.


10. Absent a request for rehearing, this case will be closed and removed from the Commission's docket upon expiration of the statutory time period to request rehearing.

By the Commission

Vice Chairman Kent A. Chandler  
dissenting in part



ATTEST:

  
\_\_\_\_\_ for  
Executive Director

Case No. 2020-00290

**Opinion of Vice Chairman Kent A. Chandler in Case No. 2020-00290, Concurring  
In Part and Dissenting In Part**

Although I appreciate the Majority’s well-written and exhaustive Order, particularly given the complexity of the matter before us, I must write separately to dissent in significant part regarding the Order’s conclusion and rates. Before explaining the reason for which I dissent, I note that I concur on a number of items in the Majority’s Order. I concur with the Majority insofar as they reaffirm the Commission’s previous decisions denying the inclusion of the 00297 systems as part of this request to increase rates.<sup>1</sup> I also concur with the Majority’s decision regarding “Procedural Issues.”<sup>2</sup> Finally, I find no error with the Majority Order’s determinations with regard to Certificates of Public Convenience and Necessity and the adoption of a unified tariff, generally.<sup>3</sup>

Regretfully, my ability to concur with the Majority’s Order ends there. Instead of approving the rates found in the Majority’s Order as fair, just and reasonable, I would have voted to order no change to Bluegrass Water’s present rates, due to the utility’s failure to (1) provide reasonable, sufficient or competent financial information, (2) provide the information necessary to appropriately calculate a revenue requirement, and (3) generally meet its burden of proof as to its proposed rates. Although Bluegrass Water is aware of the components of rate base<sup>4</sup> and how to calculate it, including the calculation

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<sup>1</sup> Majority Order at 3-4, 10-13. See also March 24, 2021 Order denying Bluegrass Water’s Motion to Alter the Commission’s 2/12/21 Order; February 12, 2021 Order denying Bluegrass Water’s November 18, 2020 Motion for Deviation from Requirements relating to Customer Notice.

<sup>2</sup> Majority Order at 14-15.

<sup>3</sup> *Id.* at 15-38.

<sup>4</sup> Direct Testimony of Brent G. Thies at 12-13.

of Utility Plant in Service (UPIS),<sup>5</sup> as the Majority's Order discusses, the information provided by the utility was incomplete, contrary to other sources, and wholly deficient for purposes of determining rate base. Bluegrass Water failed to provide a reasonable or competent amount for UPIS by failing to reflect any amount for asset retirements,<sup>6</sup> and failing to adequately explain discrepancies in its forecasted CWIP and UPIS calculations.<sup>7</sup> Rate base is of course a foundational component of the calculation of a utility's revenue requirement. Net investment rate base is necessary to determine a utility's operating income and depreciation expense. With a net investment rate base of \$0, for instance, a utility's revenue requirement is equal to operating expenses, while the operating expenses would include no depreciation expense. Once it was concluded that Bluegrass Water had not provided competent support or explanation for the determination of rate base, I would have found the application deficient to the point fair, just and reasonable rates could not be determined from the record. This determination would be in accordance and pursuant to KRS 278.190(3), wherein the controlling statute clearly notes "the burden of proof to show that the increased rate or charge is just and reasonable shall be upon the utility." Failure by the utility to meet its burden of proof should result in no increase in rates.

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<sup>5</sup> *Id.* at 12-15.

<sup>6</sup> See Majority Order at 44-46, wherein the majority notes that the "undisputed evidence indicates Bluegrass Water did not include any retirements in the base period, the forecasted test year, or the period between the base and forecasted periods despite providing sworn testimony with its application that it had done so," and the Majority Order goes on to discuss why doing so was results oriented to the utility's benefit and was unreasonable.

<sup>7</sup> Majority Order at 44.

Nevertheless, the derivation and presentation of rate base is not the only issue for which I would have determined the utility failed to meet its burden of proof regarding its proposed rates. Bluegrass Water provided incorrect or inconsistent amounts for depreciation<sup>8</sup>, Business Development,<sup>9</sup> and “Admin and Human Resources” expenses.<sup>10</sup> Bluegrass Water’s compensation is unreasonable, unsubstantiated and lacks and formal policy.<sup>11</sup> The only basis provided for current levels of compensation or for increases, including CSWR’s CEO’s nearly 30% raise, was contradicted by the evidence of record.<sup>12</sup>

During the pendency of this matter Bluegrass Water has spent significant time, effort, and expense explaining its inconsistent or incomplete case record. Nearly all of these issues are related to the organization’s finances or management, not necessarily Bluegrass Water’s prosecution of the case. Bluegrass Water is the master of its petition. It chose when and how to file its application in this matter. It further determined the water and wastewater systems it sought to purchase, and after purchase, the amount of investment it intended on making before, during, and after its proposed test year; a time period the utility was further in control of determining in its application. Bluegrass Water came into the Commonwealth claiming it intended to “professionaliz[e] distressed”

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<sup>8</sup> Majority Order at 46, 66-67.

<sup>9</sup> Majority Order at FN 183.

<sup>10</sup> Majority Order at 82-83.

<sup>11</sup> Majority Order at 86, FN 217 citing Bluegrass Water’s Response to Commission Staff’s Second Request, Item 24.

<sup>12</sup> See Majority Order at 86-87, stating “Bluegrass Water further argued that ‘CSWR seeks to attract the most qualified individuals and views total compensation, including the benefits package, as key to achieving that goal,’” while later noting CSWR did not review peer employers when determining employer insurance contributions and that neither Bluegrass Water nor CSWR “performed a study to compare its wages, salaries, benefits, and other compensation to other similarly-situated companies.”

utilities. As explained herein and as detailed in the Majority's Order, the support provided for the utility's proposed application and rate increase failed to satisfy Bluegrass Water's burden of proof and falls short of what should be expected from an organization of Bluegrass Water's stature. It should not fall to the utility's attorney or the Commission to rectify or explain away an applicant's material shortcomings related to the financial information provided as support for a rate increase.

Finally, with regard to Bluegrass Water and this application, I must note that none of the systems owned by the utility now was without issue at their time of transfer to Bluegrass Water. A few of the orders approving either the transfer of jurisdictional systems to Bluegrass Water or the initiation of service under KRS 278.020 of previously non-jurisdictional systems indicated the problems or condition of the current service. The Majority's Order discussed this reality in sections, noting the obligation of Bluegrass Water to enter into Agreed Orders with the Commonwealth's Energy and Environment Cabinet to cure identified deficiencies. Upon review of the systems Bluegrass Water has acquired over the past two years, I would note that most of them are older, in poor operating condition, have generally lacked recurring maintenance and require (or have required for years) significant capital investments to provide adequate service. Regardless of who purchased many of these systems, rehabilitations will need to be made in order to continue providing service. Given the size of those systems, some sort of consolidation or regionalization is likely necessary to simultaneously provide adequate service at affordable rates. I take no position on Bluegrass Water's business model at this time, but I would note that to-date I have yet to see the type of "economies of scale

and scope that can sustain and improve existing service” and a rate that appears to me as being fair, just or reasonable.<sup>13</sup>

I further write today to explain the systemic shortcomings this case has served to elevate. During the pendency of this matter, the Commission received a number of comments on the application, including those from elected officials. Public comments ranged from general concern about the ability to pay for the proposed increase, to questions of whether investments underlying the rate increase were reasonable or necessary. Many of the comments request the Commission take specific action on the application, such as considering the affordability of the proposal or the sheer increase of the application. As a practical matter, two factors are at play that complicate the Commission’s ability to make much meaningful impact on applications like the one at hand, short of a finding the utility merely has not met its burden of proof. Regrettably, these two factors exacerbate one another.

The first complicating factor is the lack of evidence before us. Short of finding an applicant has failed to meet their burden of proof, the Commission often depends on record evidence other than the applicant’s to make findings of fact contrary to the utility’s proposal. In this matter, neither intervening party, the Attorney General,<sup>14</sup> nor the Joint

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<sup>13</sup> Verified Joint Application for Approval of Acquisition and Transfer of Ownership and Control of Utility Assets, Case No. 2019-00104 (Apr. 16, 2019) at 23.

<sup>14</sup> These statements should not be construed as a critique of the Attorney General’s Office of Rate Intervention (ORI), or the Attorney General. My personal experience and understanding is that the resources available for the purpose of participating before the Commission have been limited for decades. The Attorney General’s ORI has historically been staffed exclusively by attorneys, rather than staff rate experts that can offer testimony. Further, consultant witnesses that have experience in rate matters are not inexpensive. Again, these comments are merely illustrative of a current example. The Attorney General’s ORI has occasionally experienced the same resource constraints as I detailed for the Commission below.



Intervenors provided much in the way of alternative evidence. This is not to say that either of the parties failed to play a meaningful role in the matter. Indeed, the Majority's Opinion cites a number of arguments made by both parties that it agreed with, and cited a number of times to responses to intervenor discovery requests in support of its conclusions and rationale. However, discovery and arguments can only go so far in determining fair, just and reasonable rates. Evidence is the lifeblood of administrative decisions, including those made by this Commission. One needs only review the statute and case law in regard to judicial review of Commission orders to appreciate the importance of evidence. Commission orders may only be vacated or set aside if they are found to be unreasonable or unlawful, and an order is unreasonable "only if it is determined that the evidence presented leaves no room for difference of opinion among reasonable minds."<sup>15</sup> Without contrary "affirmative" evidence, such as intervenor testimony, and other than a finding the applicant failed to meet its burden of proof, the Commission is limited in its ability to effectuate much change in an applicant's proposed rates. The only additional tool the Commission has at its discretion is its experience, case precedence and dedicated staff. Staff and Commission resources though are not what they used to be.

The Commission currently has approximately 70 employees, including the Commissioners. These employees include those that actively and substantively work on open matters, like financial analysts and attorneys, as well as staff that support the Commission's work, such as IT professionals and consumer service representatives. In

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<sup>15</sup> KRS 278.410; *Kentucky Industrial Utility Customers, Inc. v. Kentucky Utilities Company*, 983 S.W.2d 493, 499, citing *Energy Regulatory Commission v. Kentucky Power, Ky. App.*, 605 S.W.2d 46 (1980).

cases such as this one, the Commission depends on its staff to help investigate the reasonableness of the application. Commission Staff's work on these cases is invaluable, and their efforts are exactly what the General Assembly envisioned decades ago in providing the Commission an opportunity to have full-time staff that work exclusively on utility matters. Specifically, the Commission is authorized by the following statute to hire and employ competent staff to help it "perform the duties and exercise the powers conferred by law upon the Commission,"<sup>16</sup> including limiting the rates charged by utilities to only those that are "fair, just and reasonable."<sup>17</sup>

The commission acting through the executive director may employ such clerks, stenographers, rate experts, agents, special agents, engineers, accountants, auditors, inspectors, lawyers, hearing examiners, experts and other classified service employees and the commission may contract for services of persons in a professional or scientific capacity to make or conduct a hearing or a temporary or special inquiry, investigation or examination as it deems necessary to carry out the provisions of this chapter, or to perform the duties and exercise the powers conferred by law upon the commission.<sup>18</sup>

Nevertheless, in the absence of the "affirmative" evidence discussed above, the Commission depends more and more on its Staff to help investigate and analyze whether applications should approved, modified or revoked. Outright approval or denial of a proposal poses fewer complications than that of a modification, which are ordinarily made in the public interest. The Commission could outright revoke every petition before it that has a minor issue or concern, indicating the reason for denial with an opportunity for the

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<sup>16</sup> KRS 278.110.

<sup>17</sup> KRS 278.030.

<sup>18</sup> KRS 278.110.

applicant to refile. Doing so though would cause untold inefficiency and ultimately not result in any public benefit. Therefore, the Commission has for decades, likely since its inception, made material and substantive modification to proposals in order to ultimately grant their approval. This has proven to be effective and efficient. Nevertheless, without “affirmative” evidence, the Commission depends on its and its Staff’s expertise and experience to examine whatever evidence is in the record in order for the Commission to say what is fair, just and reasonable when a proposal before it is facially unfair, unjust or unreasonable. The problem the Commission finds itself in is that with more cases, and more complicated cases, coming before us, we have less staff than ever. During fiscal year 2013, for instance, the Commission employed an average 88 individuals with a personnel funding cap of 98 positions. As noted above, today we find ourselves with approximately 70 staff members, with a funding cap of 76 positions. Frankly, each year the Commission Staff is asked to do more with less.

It is cases like this that the lack of “affirmative” evidence by intervenors and the strain on Commission Staff is most evident. The Majority’s Order in this case is as long, or longer than, investor-owned electric and gas rate case orders for utilities with tens-of-thousands of customers and hundreds-of-millions of dollars in annual revenues. This is a complicated case. Without intervenor testimony, for instance, the Commission is limited in its ability to make a meaningful effort to ensure rates are fair, just and reasonable. The Commission cannot merely dismiss a proposal as being “too high,” or result in rates that are “unaffordable,” particularly given that neither assertion is supported by record evidence. The issue is not KRS Chapter 278 either. The statutes the Commission operates under are adequate on this topic. The issue, insofar as commenters and the

public seek to have the Commission play a more active role in ensuring rates are fair, just and reasonable, or service is adequate, efficient and reasonable, is a lack of resources. More resources must be dedicated to (1) providing as much evidence as possible for the Commission to consider and (2) ensuring the Commission and its Staff have the time and personnel to investigate and adjudicate proposals and make decisions in the public's interest. This can be accomplished in a number of ways, including funding, subject to Commission approval, of intervenor witness expense and merely increasing Commission Staff counts to previous levels.

Vice Chairman Kent A. Chandler  
dissenting in part

ENTERED  
AUG 02 2021  
bsb  
KENTUCKY PUBLIC  
SERVICE COMMISSION

ATTEST:



Executive Director

Case No. 2020-00290

## APPENDIX A

### APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2020-00290 DATED AUG 02 2021

13-Month Average UPIS - Sewer

	Total Estimated Project Budget	Estimated Project		13-Month Average UPIS - Sewer												13-Month Average UPIS			
		Start Date	End Date	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22		Apr-22		
Air view	\$ 325,436	Sep-20	Sep-21	-	-	-	-	-	\$ 325,436	\$ 325,436	\$ 325,436	\$ 325,436	\$ 325,436	\$ 325,436	\$ 325,436	\$ 325,436	\$ 325,436	\$ 200,289	
Monitoring System	\$ (10,000)	Sep-20	Sep-21	0	0	0	0	0	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(6,154)	
Brooklyn	266,388	Sep-20	Sep-21	266,388	266,388	266,388	266,388	266,388	266,388	266,388	266,388	266,388	266,388	266,388	266,388	266,388	266,388	266,388	
Monitoring System	(10,000)	Sep-20	Sep-21	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	
Fox Run	232,660	Sep-20	Sep-21	0	0	0	0	0	232,660	232,660	232,660	232,660	232,660	232,660	232,660	232,660	232,660	143,175	
Monitoring System	(22,000)	Sep-20	Sep-21	0	0	0	0	0	(22,000)	(22,000)	(22,000)	(22,000)	(22,000)	(22,000)	(22,000)	(22,000)	(22,000)	(13,538)	
Kingswood	101,764	Sep-20	Sep-21	0	0	0	0	0	101,764	101,764	101,764	101,764	101,764	101,764	101,764	101,764	101,764	62,624	
Monitoring System	(11,000)	Sep-20	Sep-21	0	0	0	0	0	(11,000)	(11,000)	(11,000)	(11,000)	(11,000)	(11,000)	(11,000)	(11,000)	(11,000)	(6,769)	
Lake Columbia	216,005	Sep-20	Sep-21	0	0	0	0	0	216,005	216,005	216,005	216,005	216,005	216,005	216,005	216,005	216,005	132,926	
Monitoring System	(10,000)	Sep-20	Sep-21	0	0	0	0	0	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(6,154)	
Canceled Projects	(85,000)	Sep-20	Sep-21	0	0	0	0	0	(85,000)	(85,000)	(85,000)	(85,000)	(85,000)	(85,000)	(85,000)	(85,000)	(85,000)	(52,308)	
LH Treatment	115,581	Sep-20	Sep-21	0	0	0	0	0	115,581	115,581	115,581	115,581	115,581	115,581	115,581	115,581	115,581	71,127	
Monitoring System	(7,500)	Sep-20	Sep-21	0	0	0	0	0	(7,500)	(7,500)	(7,500)	(7,500)	(7,500)	(7,500)	(7,500)	(7,500)	(7,500)	(4,815)	
Golden Acres	145,828	Sep-20	Sep-21	0	0	0	0	0	145,828	145,828	145,828	145,828	145,828	145,828	145,828	145,828	145,828	89,740	
Monitoring System	(15,000)	Sep-20	Sep-21	0	0	0	0	0	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(9,231)	
Great Oaks	95,516	Sep-20	Sep-21	0	0	0	0	0	95,516	95,516	95,516	95,516	95,516	95,516	95,516	95,516	95,516	58,700	
Monitoring System	(10,000)	Sep-20	Sep-21	0	0	0	0	0	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(6,154)	
River Bluffs	456,151	May-20	Sep-21	0	0	0	0	0	456,151	456,151	456,151	456,151	456,151	456,151	456,151	456,151	456,151	280,709	
Over Budget	(305,832)	May-20	Sep-21	0	0	0	0	0	(305,832)	(305,832)	(305,832)	(305,832)	(305,832)	(305,832)	(305,832)	(305,832)	(305,832)	(188,081)	
Monitoring System	(18,000)	May-20	Sep-21	0	0	0	0	0	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(11,077)	
Persimmon Ridge	175,167	Sep-20	Sep-21	0	0	0	0	0	175,167	175,167	175,167	175,167	175,167	175,167	175,167	175,167	175,167	107,795	
Monitoring System	(40,000)	Sep-20	Sep-21	0	0	0	0	0	(40,000)	(40,000)	(40,000)	(40,000)	(40,000)	(40,000)	(40,000)	(40,000)	(40,000)	(24,615)	
Timberland	252,169	Sep-20	Sep-21	0	0	0	0	0	252,169	252,169	252,169	252,169	252,169	252,169	252,169	252,169	252,169	155,181	
Monitoring System	(8,000)	Sep-20	Sep-21	0	0	0	0	0	(8,000)	(8,000)	(8,000)	(8,000)	(8,000)	(8,000)	(8,000)	(8,000)	(8,000)	(4,923)	
Arcadia Pines	30,938	Nov-20	Sep-21	0	0	0	0	0	30,938	30,938	30,938	30,938	30,938	30,938	30,938	30,938	30,938	19,039	
Carriage Park	62,318	Nov-20	Sep-21	0	0	0	0	0	62,318	62,318	62,318	62,318	62,318	62,318	62,318	62,318	62,318	38,350	
Marshall Ridge	44,516	Nov-20	Sep-21	0	0	0	0	0	44,516	44,516	44,516	44,516	44,516	44,516	44,516	44,516	44,516	27,395	
Randview	178,424	Nov-20	Sep-21	0	0	0	0	0	178,424	178,424	178,424	178,424	178,424	178,424	178,424	178,424	178,424	109,799	
Delaplain	857,793	Feb-21	Apr-22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	857,793	
Herrington Haven	160,450	Feb-21	Apr-22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	160,450	
SpringCrest	70,814	Feb-21	Apr-22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70,814	
Woodland Acres	347,862	Mar-21	Apr-22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	347,862	
<b>Totals</b>	<b>\$ 3,583,650</b>			<b>\$ 256,388</b>	<b>\$ 256,388</b>	<b>\$ 256,388</b>	<b>\$ 256,388</b>	<b>\$ 256,388</b>	<b>\$ 2,146,731</b>	<b>\$ 2,146,731</b>	<b>\$ 2,146,731</b>	<b>\$ 2,146,731</b>	<b>\$ 2,146,731</b>	<b>\$ 2,146,731</b>	<b>\$ 2,146,731</b>	<b>\$ 2,146,731</b>	<b>\$ 2,146,731</b>	<b>\$ 1,530,210</b>	
Add: 2019 Constructions																			300,000
Less:																			
Randview																			(65,964)
Delaplain - Wastewater																			(12,342)
Herrington Haven - Wastewater																			(5,447)
SpringCrest - Wastewater																			(28,759)
Commission's 13-Month Average UPIS																			1,719,678
Less: B GW 13-Month Average UPIS																			(8,438,874)
<b>UPIS Adjustment</b>																			<b>\$ (6,719,196)</b>

13-Month Average CWIP - Sewer

	Estimated Project		Total			Beginning														13-Month Average						
	Start Date	End Date	Estimated Project Budget	Forecasted Year Construction	Base Year Construction	Suspension Construction	Forecasted Construction	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22		Apr-22					
Anvew	Sep-20	Sep-21	\$ 325,436	\$ 64,351	\$ 198,305	\$ 62,781	\$ 261,086	\$ 273,956	\$ 286,826	\$ 299,696	\$ 312,566	\$ 325,436	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 115,288	
Monitoring System	Sep-20	Sep-21			(10,000)	0	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (3,846)	
Brocklyn	Sep-20	Dec-21					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Monitoring System	Sep-20	Dec-21																								
Fox Run	Sep-20	Sep-21	232,660	23,511	186,210	22,938	208,148	213,850	218,552	223,254	227,956	232,658	0	0	0	0	0	0	0	0	0	0	0	0	85,867	
Monitoring System	Sep-20	Sep-21			(22,000)	22,938	938	938	938	938	938	938	0	0	0	0	0	0	0	0	0	0	0	0	0	361
Kingswood	Sep-20	Sep-21	101,764	6,482	88,959	6,324	95,282	96,578	97,874	99,170	100,466	101,762	0	0	0	0	0	0	0	0	0	0	0	0	38,142	
Monitoring System	Sep-20	Sep-21			(11,000)	22,938	11,938	11,938	11,938	11,938	11,938	11,938	0	0	0	0	0	0	0	0	0	0	0	0	0	4,592
Lake Columbia	Sep-20	Sep-21	216,005	42,688	131,670	41,647	173,317	181,855	190,393	198,931	207,469	216,007	0	0	0	0	0	0	0	0	0	0	0	0	76,512	
Monitoring System	Sep-20	Sep-21			(10,000)	22,938	12,938	12,938	12,938	12,938	12,938	12,938	0	0	0	0	0	0	0	0	0	0	0	0	0	4,976
Canceled Projects	Sep-20	Sep-21			(85,000)	22,938	(62,062)	(62,062)	(62,062)	(62,062)	(62,062)	(62,062)	0	0	0	0	0	0	0	0	0	0	0	0	(23,870)	
LH Treatment	Sep-20	Sep-21	115,581	0	111,993	3,588	115,581	115,581	115,581	115,581	115,581	115,581	0	0	0	0	0	0	0	0	0	0	0	0	44,454	
Monitoring System	Sep-20	Sep-21			(7,500)	22,938	15,438	15,438	15,438	15,438	15,438	15,438	0	0	0	0	0	0	0	0	0	0	0	0	0	5,938
Golden Acres	Sep-20	Sep-21	145,828	39,268	68,250	38,310	106,560	114,414	122,268	130,122	137,976	145,830	0	0	0	0	0	0	0	0	0	0	0	0	50,047	
Monitoring System	Sep-20	Sep-21			(15,000)	22,938	7,938	7,938	7,938	7,938	7,938	7,938	0	0	0	0	0	0	0	0	0	0	0	0	0	3,053
Great Oaks	Sep-20	Sep-21	95,518	35,043	26,286	34,189	60,474	67,483	74,492	81,501	88,510	95,519	0	0	0	0	0	0	0	0	0	0	0	0	31,347	
Monitoring System	Sep-20	Sep-21			(10,000)	22,938	12,938	12,938	12,938	12,938	12,938	12,938	0	0	0	0	0	0	0	0	0	0	0	0	0	4,976
River Bluffs	May-20	Sep-21	456,151	10,994	434,432	10,726	445,158	447,357	449,556	451,755	453,954	456,153	0	0	0	0	0	0	0	0	0	0	0	0	173,752	
Over Budget	Sep-20	Sep-21			(305,632)	22,938	(282,694)	(282,694)	(282,694)	(282,694)	(282,694)	(282,694)	0	0	0	0	0	0	0	0	0	0	0	0	0	(108,728)
Monitoring System	Sep-20	Sep-21			(18,000)	22,938	4,938	4,938	4,938	4,938	4,938	4,938	0	0	0	0	0	0	0	0	0	0	0	0	0	1,899
Persimmon Ridge	Sep-20	Sep-21			175,167	22,938	198,105	198,105	198,105	198,105	198,105	198,105	0	0	0	0	0	0	0	0	0	0	0	0	0	76,194
Monitoring System	Sep-20	Sep-21			(40,000)	22,938	(17,062)	(17,062)	(17,062)	(17,062)	(17,062)	(17,062)	0	0	0	0	0	0	0	0	0	0	0	0	0	(6,562)
Timberland	Sep-20	Sep-21	252,169	80,989	92,165	79,014	171,179	187,377	203,575	219,773	235,971	252,169	0	0	0	0	0	0	0	0	0	0	0	0	84,528	
Monitoring System	Sep-20	Sep-21			(8,000)	22,938	14,938	14,938	14,938	14,938	14,938	14,938	0	0	0	0	0	0	0	0	0	0	0	0	0	5,745
Arcadia Pines	Nov-20	Sep-21	30,938	15,660	0	15,278	15,278	18,410	21,542	24,674	27,806	30,938	0	0	0	0	0	0	0	0	0	0	0	0	9,490	
Carrage Park	Nov-20	Sep-21	62,318	31,495	97	30,727	30,824	37,123	43,422	49,721	56,020	62,319	0	0	0	0	0	0	0	0	0	0	0	0	19,123	
Monitoring System	Nov-20	Sep-21			44,516	22,484	21,935	22,032	26,529	31,026	35,523	40,020	0	0	0	0	0	0	0	0	0	0	0	0	0	13,663
Randview	Nov-20	Sep-21	178,424	89,841	933	87,650	88,583	106,551	124,519	142,487	160,455	178,423	0	0	0	0	0	0	0	0	0	0	0	0	54,803	
Monitoring System	Feb-21	Apr-22			857,793	707,047	22,000	128,746	150,746	209,667	268,588	327,509	386,430	445,351	504,272	563,193	622,114	681,035	739,956	798,877	857,798	916,719	975,640	1,034,561	492,676	
Herrington Haven	Feb-21	Apr-22	160,450	135,734	0	24,716	24,716	36,027	47,338	58,649	69,960	81,271	92,582	103,893	115,204	126,515	137,826	149,137	160,448	171,759	183,070	194,381	205,692	217,003	90,681	
SpringCrest	Feb-21	Apr-22	70,814	59,906	0	10,908	10,908	15,900	20,892	25,884	30,876	35,868	40,860	45,852	50,844	55,836	60,828	65,820	70,812	75,804	80,796	85,788	90,780	95,772	40,021	
Woodland Acres	Mar-21	Apr-22	347,862	319,270	0	28,591	28,591	55,197	81,803	108,409	135,015	161,621	188,227	214,833	241,439	268,045	294,651	321,257	347,863	374,469	401,075	427,681	454,287	480,893	186,028	
			<u>\$ 3,694,227</u>	<u>\$ 1,684,763</u>	<u>\$ 994,433</u>	<u>\$ 923,323</u>	<u>\$ 1,917,755</u>	<u>\$ 2,112,147</u>	<u>\$ 2,306,539</u>	<u>\$ 2,500,931</u>	<u>\$ 2,695,323</u>	<u>\$ 2,889,715</u>	<u>\$ 825,941</u>	<u>\$ 927,771</u>	<u>\$ 1,029,601</u>	<u>\$ 1,131,431</u>	<u>\$ 1,233,261</u>	<u>\$ 1,335,091</u>	<u>\$ 1,436,921</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	1,571,130
Less:																										
Randview																										(492,676)
Delaplain - Wastewater																										(90,681)
Herrington Haven - Wastewater																										(40,021)
SpringCrest - Wastewater																										(186,028)
Commission 13-Month Average CWIP																										761,724
Less: BGW 13-Month Average CWIP																										(877,758)
CWIP Adjustment																										<u>\$ (116,034)</u>

13-Month Average UPIs - Water																	
System	Total Estimated Project Budget	Estimated Project															13-Month Average
		Start Date	End Date	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	
Center Ridge WD01 - Water	\$ 152,910	Jun-20	Sep-21	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 152,910	\$ 152,910	\$ 152,910	\$ 152,910	\$ 152,910	\$ 152,910	\$ 152,910	\$ 152,910	\$ 94,098
Center Ridge WD02 - Water	\$ 203,999	Jun-20	Sep-21	0	0	0	0	0	203,999	203,999	203,999	203,999	203,999	203,999	203,999	203,999	125,538
Center Ridge WD03 - Water	\$ 243,354	Jun-20	Sep-21	0	0	0	0	0	243,354	243,354	243,354	243,354	243,354	243,354	243,354	243,354	149,756
Center Ridge WD04 - Water	\$ 137,046	Jun-20	Sep-21	0	0	0	0	0	137,046	137,046	137,046	137,046	137,046	137,046	137,046	137,046	84,336
Monitoring	\$ (40,000)	Jun-20	Sep-21						(40,000)	(40,000)	(40,000)	(40,000)	(40,000)	(40,000)	(40,000)	(40,000)	(24,615)
Eliminated Projects	\$ (15,000)	Jun-20	Sep-21						(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(15,000)	(9,231)
Totals				\$ -	\$ -	\$ -	\$ -	\$ -	\$ 682,310	\$ 682,310	\$ 682,310	\$ 682,310	\$ 682,310	\$ 682,310	\$ 682,310	\$ 682,310	419,882
Less: BGW 13-Month Average UPIs																	(1,188,537)
UPIs Adjustment																	\$ (768,655)

13-Month Average CWP - Water																					
	Estimated Project		Total		Beginning															13-Month Average	
	Start Date	End Date	Estimated Project Budget	Forecasted Year Construction	Base Year Construction	Suspension Construction	Beginning Forecasted Construction	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22		Apr-22
Center Ridge WD01 - Water	Jun-20	Sep-21	\$ 152,910	\$ 46,307	\$ 61,426	\$ 45,177	\$ 106,603	\$ 115,864	\$ 125,125	\$ 134,386	\$ 143,647	\$ 152,908	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 51,687
Center Ridge WD02 - Water	Jun-20	Sep-21	203,999	51,629	102,000	50,370	152,370	162,696	173,022	183,348	193,674	204,000	0	0	0	0	0	0	0	0	70,518
Center Ridge WD03 - Water	Jun-20	Sep-21	243,354	101,333	43,159	98,862	142,021	162,288	182,555	202,822	223,089	243,356	0	0	0	0	0	0	0	0	78,008
Center Ridge WD04 - Water	Jun-20	Sep-21	137,046	45,766	46,631	44,650	91,281	100,434	109,587	118,740	127,893	137,046	0	0	0	0	0	0	0	0	45,669
		Sep-21		(40,000)			(40,000)	(48,000)	(56,000)	(64,000)	(72,000)	(80,000)	0	0	0	0	0	0	0	0	(24,615)
		Sep-21		(15,000)			(15,000)	(18,000)	(21,000)	(24,000)	(27,000)	(30,000)	0	0	0	0	0	0	0	0	(9,231)
Totals			\$ 737,310	\$ 190,035	\$ 253,216	\$ 239,058	\$ 437,275	\$ 475,282	\$ 513,289	\$ 551,296	\$ 589,303	\$ 627,310	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Commission's 13-Month Average CWP																					212,036
Less: BGW 13-Month Average CWP																					(97,909)
CWP Adjustment																					\$ 114,127



APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE  
COMMISSION IN CASE NO. 2020-00290 DATED AUG 02 2021

Water Rates

Center Ridge Water System

Flat Rate \$77.63 Per Month

Nonrecurring Charges

Tap Fee	\$350.00
Connection	0.00
Reconnection	0.00
Late Payment Penalty	0.00
Returned Check Charge	0.00

Sewer Rates

All Systems except Delaplain, Herrington  
Haven, Springcrest, and Woodland Acres

Residential	\$85.97	Per Month per unit
Multi-Family	64.48	Per Month per unit
Non-residential/Commercial	214.93	Per Month per unit
Residential Equivalent 12,000 gallons		

Nonrecurring Charges

Airview Estates	
Tap On Fee	\$0.00
Late Payment Penalty	0.00
Returned Check Fee	0.00
Termination of Service Charge	0.00
Reconnection of Service Charge	0.00

Arcadia Pines	
Late Payment Penalty	\$0.00
Tap On Fee	500.00

Brocklyn Subdivision	
Tap On Fee	\$0.00
Late Payment Penalty	0.00
Returned Check Fee	0.00

Termination of Service Charge	0.00
Reconnection of Service Charge	0.00
Carriage Park	
Late Payment Penalty	\$0.00
Tap On Fee	0.00
Fox Run Estates	
Tap On Fee	\$0.00
Late Payment Penalty	0.00
Returned Check Fee	0.00
Termination of Service Charge	0.00
Reconnection of Service Charge	0.00
Kingswood Development	
Tap On Fee	\$0.00
Lake Columbia Estates	
Late Payment Penalty	\$0.00
Tap On Fee	\$0.00
Longview and Homestead Subdivisions	
Tap On Fee	\$0.00
Marshall Ridge	
Late Payment Penalty	\$0.00
Tap On Fee	500.00
Great Oaks Subdivision	
Late Payment Penalty	\$0.00
Returned Check Fee	0.00
Field Collection Charge	0.00
Tap On Fee	750.00
Reconnection Fee	0.00
Golden Acres Subdivision	
Late Payment Penalty	\$0.00
Returned Check Fee	0.00
Field Collection Charge	0.00

Tap On Fee	250.00
Reconnection Fee	0.00
Persimmon Ridge Subdivision	
Late Penalty Payment	0.00
Tap On Fee	0.00
Randview	
Late Payment Penalty	\$0.00
Connection Fee	0.00
Reconnection Fee	0.00
Duplex	
Connection Fee	0.00
Reconnection Fee	0.00
Tap On Fee	0.00
City of River Bluffs & Environs	
Late Payment Penalty	\$0.00
Tap On Fee	0.00
Timberland Subdivision	
Late Payment Penalty	\$0.00
Tap On Fee	0.00

APPENDIX C

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE  
COMMISSION IN CASE NO. 2020-00290 DATED AUG 02 2021

	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21
Bluegrass Water Connections	3,408	3,408	3,408	3,408	3,408	3,408	3,408	3,408	3,408	3,408	3,408	3,408	3,408
Total CSWR Connections	52,605	52,605	59,605	59,605	59,605	69,805	69,805	69,805	85,000	85,000	85,000	85,000	85,000
Monthly Allocation Percentage	6.48%	6.48%	5.72%	5.72%	5.72%	4.88%	4.88%	4.88%	4.01%	4.01%	4.01%	4.01%	4.01%
													13-Month Average Allocation Percentage
													4.98%
Base Connections	52,605	52,605	59,605	59,605	59,605	69,805	69,805	69,805	85,000	85,000	85,000	85,000	85,000
Continual Additional Connections	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000
Total Connections	87,605	87,605	94,605	94,605	94,605	104,805	104,805	104,805	120,000	120,000	120,000	120,000	120,000
Percentage of Connections Attributed to BD per Month	39.95%	39.95%	37.00%	37.00%	37.00%	33.40%	33.40%	33.40%	29.17%	29.17%	29.17%	29.17%	29.17%
													13 Month Average
													33.61%

## APPENDIX D

### APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2020-00290 DATED AUG 02 2021

**CSWR, LLC General & Administrative Budget**

Admin & Human Resources	\$ 6,320,268		(236,282)	
			(691,141)	Adjustment to Forecast Number
			(139,338)	Removal of Unfilled Vacant Position Compensation
			(21,248)	Adjustment to Health Insurance
			(177,289)	Adjustment to Dental Insurance
			(102,000)	Allowance for 3% salary raise from the end of base period
			(8,864)	Removal of Executive Auto Allowance
			4,944,106	Adjustment to 401(k) Matching
Office Supplies	106,271		106,271	
Management Consulting	243,300	(243,300)		- Failure to Meet Burden
Engineering Consulting	20,400		20,400	
Auditor & Accounting Services	133,000		133,000	
Legal Fees	87,684		87,684	
IT	238,250		238,250	
Rent	168,000		168,000	
Insurance	77,000		77,000	
Miscellaneous	6,000		6,000	
<b>Total Corporate SG&amp;A</b>	<b>\$ 7,400,173</b>		<b>\$ 5,780,711</b>	

Total Adjusted Corporate SG&A	\$	5,780,711
Multiply By: BD Percentage		<u>33.61%</u>

Allocated BD		<u>1,942,814</u>
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Total Adjusted Corporate SG&A		5,780,711
Subtract: Allocated BD		<u>1,942,814</u>

Allocatable Corporate SG&A	\$	<u>3,837,897</u>
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Multiply by: Overhead Allocation Percentage		4.98%
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Bluegrass Water Allocated Overhead	\$	191,127
KY Specific Travel Expense	\$	<u>11,392</u>

Bluegrass Water Overhead	\$	<u>202,519</u>
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	Bluegrass Customers	Percent of Total Customers	Annual OHA	
Sewer	2,321	87.35%	\$	176,909
Water	336	12.65%	\$	25,610
<b>Total</b>	<u>2,657</u>			

## APPENDIX E

### APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2020-00290 DATED AUG 02 2021

Detailed Income Statement - Sewer						
Description	Bluegrass Water's Forecasted Test Year	Commission Adjustments	System Removal	Commission Forecasted Test Year	Revenue Increase	Commission Test-Year at New Rates
<u>Operating Revenues</u>						
Revenues - Sewer Service	\$ 1,154,988	\$ -	\$ (246,822)	\$ 908,166	\$ 959,583	\$ 1,867,749
<u>Operating Expenses</u>						
Operation and Maintenance						
Sewer - Contract Operations	1,029,348	0	(219,973)	809,375	0	809,375
Sewer - Other Operations	310,377	0	(66,328)	244,049	0	244,049
Sewer - Maintenance	112,008	0	(23,936)	88,072	0	88,072
Customer Billing Expense	75,237	0	(16,078)	59,159	0	59,159
Uncollectible Accounts	8,662	0	(1,851)	6,811	7,197	14,008
Allocated Overhead	292,902	(115,993)	(37,806)	139,103	0	139,103
Administrative Services	41,122	(35,450)	(1,212)	4,460	0	4,460
Property Insurance	172,604	0	(36,886)	135,718	0	135,718
Regulatory Expense	6,322	0	(1,351)	4,971	0	4,971
PSC Assessment	841	975	0	1,816	1,919	3,735
Total Operation and Maint. Exp.	<u>2,049,424</u>	<u>(150,468)</u>	<u>(405,421)</u>	<u>1,493,535</u>	<u>9,116</u>	<u>1,502,651</u>
<u>Other Expenses</u>						
Depreciation - Net of CIAC Amort	264,095	(214,398)	0	49,697	0	49,697
State Income Tax	0	(28,544)	0	(28,544)	47,523	18,979
Federal Income Tax	0	(113,889)	0	(113,889)	189,618	75,729
General Taxes	17,622	0	(3,766)	13,856	0	13,856
Total Other Expense	<u>281,716</u>	<u>(356,831)</u>	<u>(3,766)</u>	<u>(78,880)</u>	<u>237,141</u>	<u>158,261</u>
Total Operating Expenses	<u>2,331,141</u>	<u>(507,299)</u>	<u>(409,187)</u>	<u>1,414,654</u>	<u>246,257</u>	<u>1,660,911</u>
Net Utility Operating Income	<u>\$ (1,176,153)</u>	<u>\$ 507,299</u>	<u>\$ 162,365</u>	<u>\$ (506,488)</u>	<u>\$ 713,326</u>	<u>\$ 206,838</u>

## APPENDIX F

### APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2020-00290 DATED AUG 02 2021

Detailed Income Statement - Water					
Description	Bluegrass Water's Forecasted Test Year	Commission Adjustments	Commission Forecasted Test Year	Revenue Increase	Commission Test-Year at New Rates
<u>Operating Revenues</u>					
Revenues - Water Sales	\$ 90,000	\$ -	\$ 90,000	\$ 223,001	\$ 313,001
<u>Operating Expenses</u>					
Operation and Maintenance:					
Water - Contract Operations	144,048	0	144,048	0	144,048
Water - Other Operations	30,000	0	30,000	0	30,000
Water - Maintenance	7,488	0	7,488	0	7,488
Customer Billing Expense	10,823	0	10,823	0	10,823
Uncollectible Accounts	675	0	675	1,673	2,348
Allocated Overhead	43,059	(17,449)	25,610	0	25,610
Administrative Services	7,109	(6,176)	933	0	933
Property Insurance	10,812	0	10,812	0	10,812
Regulatory Expense	0	180	180	446	626
Total Operating and Maint. Exp.	254,014	(23,445)	230,569	2,119	232,688
<u>Other Expenses</u>					
Depreciation - Net of CIAC Amort	31,941	(20,274)	11,667	0	11,667
<u>State Tax</u>					
State Income Tax	0	(6,275)	(6,275)	11,044	4,769
Current Federal Income Tax	0	(25,037)	(25,037)	44,066	19,029
General Taxes	92	0	92	0	92
Total Other Expense	32,033	(51,586)	(19,553)	55,110	35,557
Total Operating Expenses	286,047	(75,031)	211,016	57,229	268,245
Utility Operating Income	\$ (196,047)	\$ 75,031	\$ (121,016)	\$ 165,772	\$ 44,756

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\*Denotes Served by Email

Service List for Case 2020-00290



# VIDEOS





# 2021 Annual Water Quality Report

**Bluegrass Utility Operating Company  
Center Ridge Water District #1  
KY0180549**

## **ATTENTION: Landlords and Apartment Owners**

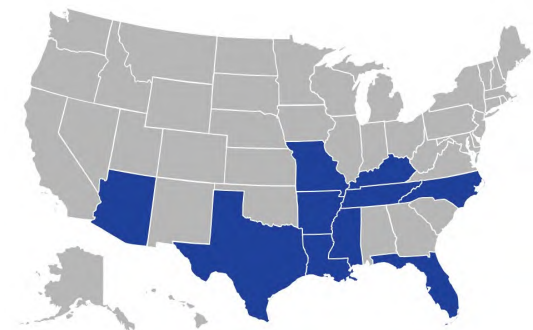
Please share a copy of this notice with your tenants. It includes important information about their drinking water quality.



**BLUEGRASS WATER**

Utility Operating Company

A CSWR Managed Utility



## Table of Contents

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- 03 About Us
  - 04 About Your Drinking Water Supply
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  - 10 How to Participate
- 

### What is a Consumer Confidence Report (CCR)?

We proudly present our Annual Water Quality Report, also referred to as a CCR. CCRs provide customers with important information regarding the quality of their drinking water. They let customers know what contaminants, if any, were detected in their drinking water, as well as associated potential health effects. We are pleased to report the results of the laboratory testing of your drinking water during the calendar year of 2022. For your information, we have compiled a list of tables showing the testing of your drinking water during 2022.

# About Us

Central States Water Resources is transforming how water utilities work by using technology and innovation to quickly assess and invest in reliable infrastructure that meets or exceeds stringent state and federal safety standards, ensuring all communities across the U.S. have access to safe, clean and reliable water resources while protecting the aquifers, lakes, rivers and streams that are essential to our world.

## Our Mission:

Central States Water Resources is working to bring safe, reliable, and environmentally responsible water resources to every community in the U.S.

This report contains important information about the source and quality of your drinking water. If you would like a paper copy of the 2021 Report mailed to your home, please call (855)-801-8440

Este informe contiene información importante sobre la fuente y la calidad de su agua potable. Si desea recibir una copia escrita del informe anual de la calidad del agua del 2021 en su casa, llame al número de teléfono (855)-801-8440

# About Your Drinking Water Supply

## WHERE YOUR WATER COMES FROM

**Water Source:** Groundwater

**Source Water Assessment:** There are a total of twenty-seven potential sources of contamination within the Center Ridge Water System's wellhead protection area. All of these potential sources have been identified as septic systems and are ranked as having a medium risk to contamination of the aquifer. The aquifer has been determined to have a medium risk ranking.

**Disinfection Treatment:** The water supplied to you is treated with Chlorine to maintain water quality in the distribution system.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

# Definition of Terms

**Action Level (AL):** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, that a water system must follow.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Maximum Residual Disinfectant Level (MRDL):** the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Nephelometric Units (NTU):** Measure of the clarity, or turbidity of the water.

**pH:** A measure of acidity, 7.0 being neutral.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

**NA:** Not Applicable

**ND:** Not Detected

**Picocuries per liter (pCi/L):** Measure of the natural rate of disintegration of radioactive contaminants in water.

**Parts per billion (ppb):** One part substance per billion parts water or microgram per liter ( $\mu\text{g/L}$ ).

**Parts per million:** One part substance per million parts water or milligram per liter ( $\text{mg/L}$ ).

**Parts per trillion (ppt):** One part substance per trillion parts water or nanograms per liter ( $\text{ng/L}$ ).

# Sources of Contaminants

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

## Contaminants That May be Present in Source Water:

Microbes	such as viruses and bacteria may come which may occur through sewage treatment plants, domesticated animals, or wildlife.
Inorganic Chemicals	such as toxic heavy metals and salts, which come from urban stormwater runoff, industrial waste discharges, oil and gas production, mining, or farming.
Pesticides & Herbicides	which may come from a variety of sources such as agricultural or stormwater runoff, and residential uses.
Organic Chemicals	including synthetic or volatile organic human-made compounds, such as dry-cleaning solvents, may occur due to due to disposal of untreated waste into septic systems or stormwater runoff.
Radioactive Contaminants	which can be naturally occurring or man-made may occur through weathering rock, mining, and runoff.

### Special Health Information:

Some people may be more vulnerable to contaminants in drinking water than the general population. Those who are undergoing chemotherapy or living with HIV/AIDs, transplants, children and infants, elderly, and pregnant women can be at particular risk for infections. If you have special health care needs, please consider taking additional precautions with your drinking water and seek advice form a health care provider. For more information visit [www.epa.gov/safewater/healthcare/special.html](http://www.epa.gov/safewater/healthcare/special.html).

# Water Quality Results

- Central States and our Utility Operating Companies conduct extensive monitoring to determine if your water meets all water quality standards. The detections of our monitoring are reported in the following tables.
- Some unregulated substances are measured, but MCLs have not been established by the government. These contaminants are shown for your information.
- Regulated contaminants not listed in this table were not found in the treated water

Microbiological	Collection Date	Positive	Violation (Y or N)	Unit	MCL	MCLG	Typical Source
No Detected Results were found in the year 2021							

Inorganic Chemicals	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
Cadmium	12/28/2020	0.001	NA	mg/L	0.005	0.005	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints

Lead and Copper	Collection Date	90th Percentile	Samples Exceeding AL	Unit	AL	Typical Source
Copper, Free	2021	0.1	0	mg/L	1.3	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	2017-2019	0	0	mg/L	0.015	Corrosion of household plumbing systems, Erosion of natural deposits.

Nitrate/Nitrite	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
Nitrate	4/26/2021	0.4	NA	mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks, sew age; Erosion of natural deposits
Nitrite	4/26/2021	0.04	NA	mg/L	1	1	Runoff from fertilizer use; Leaching from septic tanks, sew age; Erosion of natural deposits

Disinfectants	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MRDL	MRDLG	Typical Source
Chlorine	8/1/2021	1.51	0.45-1.51	mg/L	4	4	Water additive used to control microbes

Disinfection Byproducts	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
TTHM	2020	0.0005	NA	mg/L	NA	NA	By-product of drinking water disinfection
HAA5	2020	0.002	NA	mg/L	NA	NA	By-product of drinking water disinfection

Radionuclides	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
No Detected Results were found in the year 2021							

Synthetic Organic Chemicals	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
No Detected Results were found in the year 2021							

Volatile Organic Chemicals	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
No Detected Results were found in the year 2021							



- No violations reported in 2021.



# Lead

Water service lines that carry water to your home could contain lead. Corroding pipes can release lead into drinking water as it travels to your home. If present at elevated levels, lead can cause serious health problems, especially in children, infants and pregnant women.

## Reduce Your Exposure

If you live in an older home, consider having a licensed plumber check your plumbing for lead. If you are concerned about lead in your water, you may wish to have your water tested. Additional information on lead in drinking water, testing methods and steps to minimize exposure is available at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).



1. **Run your water-** Before drinking, flush your home's pipes by running the tap, taking a shower, doing laundry, or dishes. Residents should contact their water utility for recommendations about flushing times in their community.



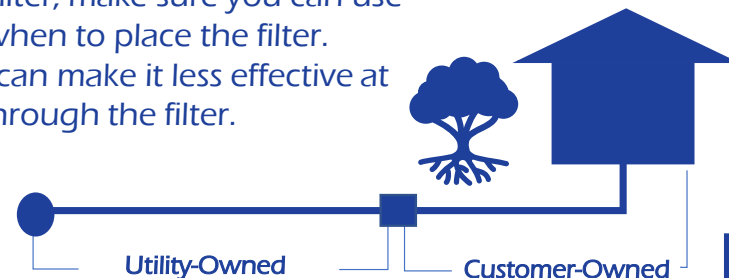
2. **Using cold water-** Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water.



3. **3. Clean your aerator-** Regularly clean your faucet's screen (aerator). Sediments, debris, and lead particles can collect in your aerator.



4. **4. Use your filter properly-** If you use a filter, make sure you can use a filter certified to remove lead. Know when to place the filter. Using the cartridge after it has expired can make it less effective at removing lead. Do not run hot water through the filter.



# How to Participate

Protecting drinking water at its source is an important part of the process to treat and deliver high quality water. It takes a community effort to protect shared resources. This includes utilities, businesses, residents, government and non-profit organizations.

## WATER INFORMATION SOURCES:

Central States Water Resources (CSWR)

<https://www.centralstateswaterresources.com/contact-us/>

Kentucky Energy and Environment Cabinet

<https://eec.ky.gov/>

United States Environmental Protection Agency (USEPA)

[www.epa.gov/safewater](http://www.epa.gov/safewater)

Safe Drinking Water Hotline

(800) 426-4791

Centers for Disease Control and Prevention [www.cdc.gov](http://www.cdc.gov)

American Water Works Association [www.drinktap.org](http://www.drinktap.org)

Water Quality Association [www.wqa.org](http://www.wqa.org)

National Library of Medicine/National Institute of Health

[www.nlm.nih.gov/medlineplus/drinkingwater.html](http://www.nlm.nih.gov/medlineplus/drinkingwater.html)

## WHAT CAN YOU DO?



Properly dispose of pharmaceuticals, household chemicals, oils and paints.



Clean up heating or fuel tank leaks with cat litter. Sweep material and seal in bag. Check with local facility for disposal.



Clean up after your pets and limit the use of fertilizers and pesticides.



Take part in watershed activities or volunteer outreach programs.



# 2022 Annual Water Quality Report

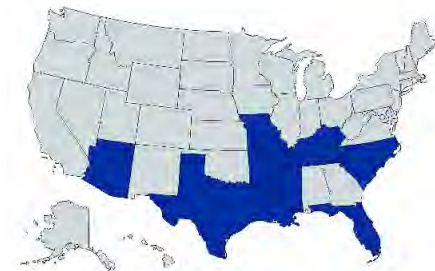
Bluegrass Water Utility Operating Company  
Center Ridge Water District #2  
PWS ID KY0180509

## ATTENTION: Landlords and Apartment Owners

Please share a copy of this notice with your tenants.  
It includes important information about their  
drinking water quality.



**BLUEGRASS WATER**  
Utility Operating Company  
A CSWR Managed Utility



# Table of Contents

3. About Us
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9. Water Quality Results
10. Notice of Violations
11. Lead
12. Backflow Prevention
13. How to Participate

## What is a Consumer Confidence Report (CCR)?

We proudly present our Annual Water Quality Report, also referred to as a CCR. CCRs provide customers with important information regarding the quality of their drinking water. They let customers know what contaminants, if any, were detected in their drinking water, as well as associated potential health effects. We are pleased to report the results of the laboratory testing of your drinking water during the calendar year of 2022. For your information, we have compiled a list of tables showing the testing of your drinking water during 2022.

## About Us

Central States Water Resources is transforming how water utilities work by using technology and innovation to quickly assess and invest in reliable infrastructure that meets or exceeds stringent state and federal safety standards, ensuring all communities across the U.S. have access to safe, clean and reliable water resources while protecting the aquifers, lakes, rivers and streams that are essential to our world.

### **Our Mission:**

Central States Water Resources is working to bring safe, reliable, and environmentally responsible water resources to every community in the U.S.

This report contains important information about the source and quality of your drinking water. If you would like a paper copy of the 2022 Report mailed to your home, please call 1-866-752-8982

Este informe contiene información importante sobre la fuente y la calidad de su agua potable. Si desea recibir una copia escrita del informe anual de la calidad del agua del 2022 en su casa, llame al número de teléfono 1-866-752-8982

# About Your Drinking Water Supply

## **Water Source: Groundwater Source Water Assessment:**

There are a total of twenty-seven potential sources of contamination within the Center Ridge Water System's wellhead protection area. All the potential sources have been identified as septic systems and are ranked as having a medium risk to contamination of the aquifer. The aquifer has been determined to have a medium risk ranking.

## **Disinfection Treatment:**

The water supplied to you is treated with Chlorine to maintain water quality in the distribution system.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

# Definition of Terms

**Action Level (AL):** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, that a water system must follow.

**Action Level Goal (ALG):** The level of a contaminant in drinking water below which there is no known or expected risk of health. ALGs allow for a margin of safety.

**Average (Avg):** Regulatory compliance with some MCLs are based on running annual average of monthly samples.

**Level 1 Assessment:** A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Level 2 Assessment:** A very detailed study of the water system to identify potential problems and determine (if Possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.



# Definition of Terms

**Million fibers per Liter (MFL):** A measure of asbestos

**Millirems per Year (MREM):** A measure of radiation absorbed by the body

**Minimum Reporting Limit (MRL):** The smallest measured concentration of a substance that can be reliably measured by a given analytical method.

**Not Applicable (NA):** Sampling was not completed by regulation or was not required.

**Not Detected (ND):** Not detectable at reporting limit.

**Nephelometric Turbidity Units (NTU):** Measure of clarity or turbidity of the water.

**Picocuries per liter (pCi/L):** Measure of the natural rate of disintegration of radioactive contaminants in water.

**Parts per billion (ppb):** One part substance per billion parts water or microgram per liter ( $\mu\text{g/L}$ ).

**Parts per million (ppm):** One part substance per million parts water or milligram per liter ( $\text{mg/L}$ ).

**Parts per quadrillion (ppq):** Parts per quadrillion, or picograms per liter ( $\text{pg/L}$ )

**Parts per trillion (ppt):** One part substance per trillion parts water or nanograms per liter ( $\text{ng/L}$ ).

$\text{ppm} \times 1000 = \text{ppb}$   
 $\text{ppb} \times 1000 = \text{ppt}$   
 $\text{ppt} \times 1000 = \text{ppq}$

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

# Sources of Contaminants

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

## Contaminants That May be Present in Source Water:

Microbes	such as viruses and bacteria may come which may occur through sewage treatment plants, domesticated animals, or wildlife.
Inorganic Chemicals	such as toxic heavy metals and salts, which come from urban stormwater runoff, industrial waste discharges, oil and gas production, mining, or farming.
Pesticides & Herbicides	which may come from a variety of sources such as agricultural or stormwater runoff, and residential uses.
Organic Chemicals	including synthetic or volatile organic human-made compounds, such as dry-cleaning solvents, may occur due to disposal of untreated waste into septic systems or stormwater runoff.
Radioactive Contaminants	which can be naturally occurring or man-made may occur through weathering rock, mining, and runoff.

## Special Health Information:

Some people may be more vulnerable to contaminants in drinking water than the general population. Those who are undergoing chemotherapy or living with HIV/AIDs, transplants, children and infants, elderly, and pregnant women can be at particular risk for infections. If you have special health care needs, please consider taking additional precautions with your drinking water and seek advice from a health care provider. For more information visit [www.epa.gov/safewater/healthcare/special.html](http://www.epa.gov/safewater/healthcare/special.html).

# Water Quality Report

The following page will display the results of your water quality

- Central States and our Utility Operating Companies conduct extensive monitoring to determine if your water meets all water quality standards. The detections of our monitoring are reported in the following tables.
- Regulated contaminants not listed in this table, were not found in the treated water supply.



# Water Quality Results

2022 Water Quality Test Results							
Disinfectants and Disinfection By-Products	Violation Y or N	Running Annual Average (RAA)	Range of All Samples (Low-High)	MRDL	MRDLG	Collection Date	Likely Source of Contamination
Chlorine (ppm)	N	0.9	0.8-0.9	4	4	2022	Water additive used to control microbes
Lead and Copper	Violation Y or N	90 <sup>th</sup> Percentile	Number of Samples Exceeds AL	AL	ALG	Collection Date	Likely Source of Contamination
Lead (ppb)	N	0.012	0	15	0	7/20/2021	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Copper (ppm)	N	6.4	0	1.3	1.3	2022	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Radionuclides	Violation Y or N	Running Annual Average (RAA) OR Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Collection Date	Likely Source of Contamination
Combined Radium 226/228 (pCi/L)	N	1.68	N/A	5	0	5/11/2021	Erosion of natural deposits.
Gross alpha excluding radon and uranium (pCi/L)	N	1.1	N/A	15	0	5/11/2021	Erosion of natural deposits.
Inorganic Chemicals (IOC)	Violation Y or N	Running Annual Average (RAA) OR Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Collection Date	Likely Source of Contamination
Barium (ppm)	N	0.0052	N/A	2	2	12/10/2018	Discharge of drilling wastes; Discharge from metal refineries; erosion of natural deposits.
Nitrate *measured as Nitrogen (ppm)	N	1	0.53-0.54	10	10	2022	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits.
<b>Health Language:</b>							
Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause "blue baby syndrome". Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, and detected nitrate levels are above 5 ppm, you should ask advice from your health care provider.							

Center Ridge Water District #2  
reported no violations in 2022.



# Lead

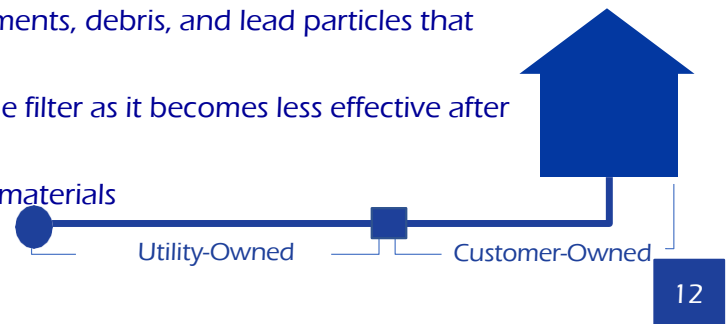
If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Confluence Rivers is responsible for providing high quality drinking water but cannot control the variety of plumbing materials. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking.

In compliance with Federal Regulation (40 CFR Part 141 Subpart 1) CSWR finds it necessary for the health and safety of our customers to adopt lead control standards which ban the use of lead materials in the public drinking water system and private plumbing connected to the public drinking water system. **No connection shall be installed or maintained where lead base materials were used in construction or modification of the drinking water plumbing after January 1, 1989. Contact CSWR immediately if you suspect you have lead plumbing.**

If you live in an older home or are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

## Reduce Your Exposure

1. **Flush your home's pipes** by running the tap before drinking the water. Residents should contact their water utility for recommendations about flushing times in their community.
2. **Use Cold water** only for drinking, cooking, and making baby formula. Boiling water does not remove lead.
3. **Clean your aerator** (screen of faucet) regularly to remove sediments, debris, and lead particles that naturally collect over time.
4. **Use a filter** that is certified to remove lead. Regularly replace the filter as it becomes less effective after expiration. Do not run hot water through the filter.
5. **Have a licensed plumber check your plumbing for lead-based materials**

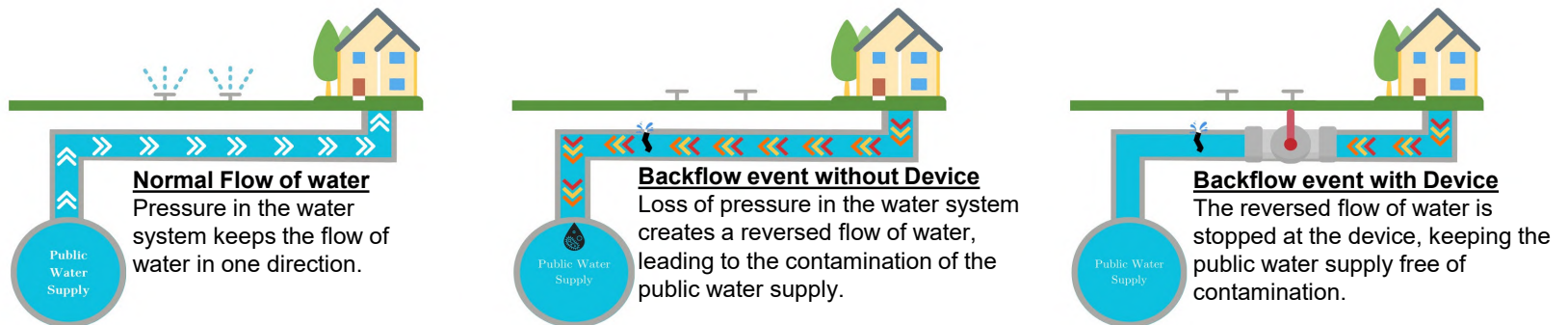


# Backflow Prevention

Backflow is the unwanted reversal of flow from a customer to the water supply. This is caused by a loss of pressure in the water supply line or an increase in pressure on the customer side. Common situations where backflow occurs are water main breaks or firefighting events. These events create low pressure in the distribution system. Backpressure can cause backflow when the pressure in a building exceeds the pressure in the water supply line, causing liquid from the customer's line to move into the water supply. Backflow Prevention Devices are designed to restrict the flow of water to one direction.

## Cross Connection

Cross-connections are links between a customer and the drinking water supply lines. Cross-Connections may contaminate the drinking water supply if there is a backflow event. Backflow through cross-connections are very serious and have the potential to cause serious health hazards.



## Common household items requiring installation of a Backflow Prevention Device

Lawn Irrigation/Sprinkler System, Pool, Hot Tub, Fire Protection Sprinklers and Boilers

If you have any questions about Backflow Prevention or would like to notify CSWR of your Backflow Devices, please call or email: Bluegrass Water Utility Operating Company at 1-866-752-8982 or [support@bluegrasswateruoc.com](mailto:support@bluegrasswateruoc.com)

# How to Participate

Protecting drinking water at its source is an important part of the process to treat and deliver high quality water. It takes a community effort to protect shared resources. This includes utilities, businesses, residents, government and non-profit organizations.

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## WATER INFORMATION SOURCES:

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## WHAT CAN YOU DO?



Properly dispose of pharmaceuticals, household chemicals, oils and paints.



Clean up heating or fuel tank leaks with cat litter. Sweep material and seal in bag. Check with local facility for disposal.



Clean up after your pets and limit the use of fertilizers and pesticides.



Take part in watershed activities or volunteer outreach programs.





# 2021 Annual Water Quality Report

**Bluegrass Utility Operating Company  
Center Ridge Water District #2  
KY0180509**

## **ATTENTION: Landlords and Apartment Owners**

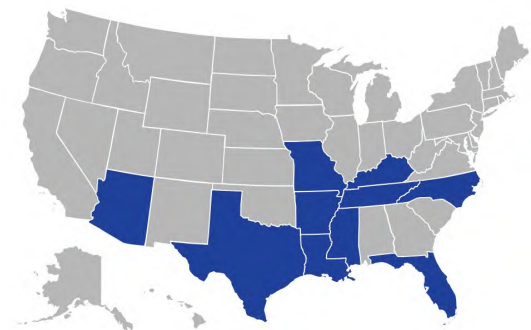
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**BLUEGRASS WATER**

Utility Operating Company

A CSWR Managed Utility



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### What is a Consumer Confidence Report (CCR)?

We proudly present our Annual Water Quality Report, also referred to as a CCR. CCRs provide customers with important information regarding the quality of their drinking water. They let customers know what contaminants, if any, were detected in their drinking water, as well as associated potential health effects. We are pleased to report the results of the laboratory testing of your drinking water during the calendar year of 2022. For your information, we have compiled a list of tables showing the testing of your drinking water during 2022.

# About Us

Central States Water Resources is transforming how water utilities work by using technology and innovation to quickly assess and invest in reliable infrastructure that meets or exceeds stringent state and federal safety standards, ensuring all communities across the U.S. have access to safe, clean and reliable water resources while protecting the aquifers, lakes, rivers and streams that are essential to our world.

## Our Mission:

Central States Water Resources is working to bring safe, reliable, and environmentally responsible water resources to every community in the U.S.

This report contains important information about the source and quality of your drinking water. If you would like a paper copy of the 2021 Report mailed to your home, please call  
**(855)-801-8440**

Este informe contiene información importante sobre la fuente y la calidad de su agua potable. Si desea recibir una copia escrita del informe anual de la calidad del agua del 2021 en su casa, llame al número de teléfono  
**(855)-801-8440**

# About Your Drinking Water Supply

## WHERE YOUR WATER COMES FROM

**Water Source:** Groundwater

**Source Water Assessment:** There are a total of twenty-four potential sources of contamination within the Center Ridge Water System's wellhead protection area. All of these potential sources have been identified as septic systems and are ranked as having a medium risk to contamination of the aquifer. The aquifer has been determined to have a medium risk ranking.

**Disinfection Treatment:** The water supplied to you is treated with Chlorine to maintain water quality in the distribution system.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

# Definition of Terms

**Action Level (AL):** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, that a water system must follow.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

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**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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**Nephelometric Units (NTU):** Measure of the clarity, or turbidity of the water.

**pH:** A measure of acidity, 7.0 being neutral.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

**NA:** Not Applicable

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**Picocuries per liter (pCi/L):** Measure of the natural rate of disintegration of radioactive contaminants in water.

**Parts per billion (ppb):** One part substance per billion parts water or microgram per liter ( $\mu\text{g/L}$ ).

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# Sources of Contaminants

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

## Contaminants That May be Present in Source Water:

Microbes	such as viruses and bacteria may come which may occur through sewage treatment plants, domesticated animals, or wildlife.
Inorganic Chemicals	such as toxic heavy metals and salts, which come from urban stormwater runoff, industrial waste discharges, oil and gas production, mining, or farming.
Pesticides & Herbicides	which may come from a variety of sources such as agricultural or stormwater runoff, and residential uses.
Organic Chemicals	including synthetic or volatile organic human-made compounds, such as dry-cleaning solvents, may occur due to due to disposal of untreated waste into septic systems or stormwater runoff.
Radioactive Contaminants	which can be naturally occurring or man-made may occur through weathering rock, mining, and runoff.

### Special Health Information:

Some people may be more vulnerable to contaminants in drinking water than the general population. Those who are undergoing chemotherapy or living with HIV/AIDs, transplants, children and infants, elderly, and pregnant women can be at particular risk for infections. If you have special health care needs, please consider taking additional precautions with your drinking water and seek advice form a health care provider. For more information visit [www.epa.gov/safewater/healthcare/special.html](http://www.epa.gov/safewater/healthcare/special.html).

# Water Quality Results

- Central States and our Utility Operating Companies conduct extensive monitoring to determine if your water meets all water quality standards. The detections of our monitoring are reported in the following tables.
- Some unregulated substances are measured, but MCLs have not been established by the government. These contaminants are shown for your information.
- Regulated contaminants not listed in this table were not found in the treated water

Microbiological	Collection Date	Positive	Violation (Y or N)	Unit	MCL	MCLG	Typical Source
No Detected Results were found in the year 2021							

Inorganic Chemicals	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
Barium	12/10/2018	0.0052	NA	mg/L	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits

Lead and Copper	Collection Date	90th Percentile	Samples Exceeding AL	Unit	AL	Typical Source
Copper, Free	2021	0.011	0	mg/L	1.3	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	2019-2021	0.0064	0	mg/L	0.015	Corrosion of household plumbing systems, Erosion of natural deposits.

Nitrate/Nitrite	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
No Detected Results were found in the year 2021							

Disinfectants	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MRDL	MRDLG	Typical Source
Chlorine	12/1/2021	1.61	0.60-1.61	mg/L	4	4	Water additive used to control microbes

Disinfection Byproducts	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
No Detected Results were found in the year 2021							

Radionuclides	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
No Detected Results were found in the year 2021							

Synthetic Organic Chemicals	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
No Detected Results were found in the year 2021							

Volatile Organic Chemicals	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
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- During 2021 Center Ridge Water District #2 received one violation for inadequate distribution or content in the 2020 water quality report.





# Lead

Water service lines that carry water to your home could contain lead. Corroding pipes can release lead into drinking water as it travels to your home. If present at elevated levels, lead can cause serious health problems, especially in children, infants and pregnant women.

## Reduce Your Exposure

If you live in an older home, consider having a licensed plumber check your plumbing for lead. If you are concerned about lead in your water, you may wish to have your water tested. Additional information on lead in drinking water, testing methods and steps to minimize exposure is available at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).



1. **Run your water-** Before drinking, flush your home's pipes by running the tap, taking a shower, doing laundry, or dishes. Residents should contact their water utility for recommendations about flushing times in their community.



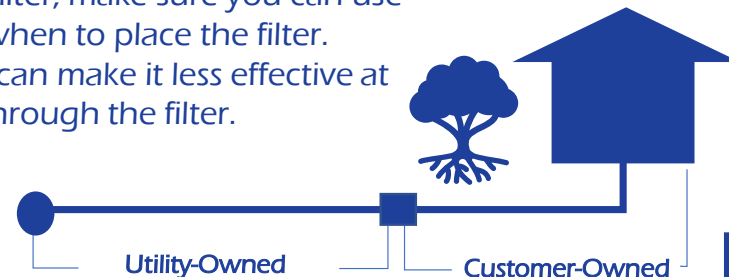
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3. **3. Clean your aerator-** Regularly clean your faucet's screen (aerator). Sediments, debris, and lead particles can collect in your aerator.



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# How to Participate

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# 2021 Annual Water Quality Report

**Bluegrass Utility Operating Company  
Center Ridge Water District #3  
KY0180502**

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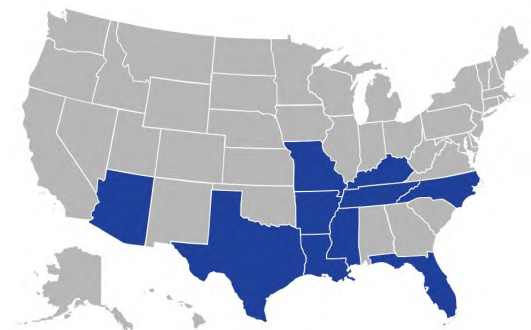
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**BLUEGRASS WATER**

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# Sources of Contaminants

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## Contaminants That May be Present in Source Water:

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Pesticides & Herbicides	which may come from a variety of sources such as agricultural or stormwater runoff, and residential uses.
Organic Chemicals	including synthetic or volatile organic human-made compounds, such as dry-cleaning solvents, may occur due to due to disposal of untreated waste into septic systems or stormwater runoff.
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### Special Health Information:

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No Detected Results were found in the year 2021							

Inorganic Chemicals	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
No Detected Results were found in the year 2021							

Lead and Copper	Collection Date	90th Percentile	Samples Exceeding AL	Unit	AL	Typical Source
Copper, Free	2021	0	0	mg/L	1.3	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	2017-2019	0	0	mg/L	0.015	Corrosion of household plumbing systems, Erosion of natural deposits.

Nitrate/Nitrite	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
Nitrate	5/11/2021	0.18	NA	mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks, sew age; Erosion of natural deposits
Nitrate-Nitrite	5/11/2021	0.18	NA	mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks, sew age; Erosion of natural deposits

Disinfectants	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MRDL	MRDLG	Typical Source
Chlorine	12/1/2021	1.65	0.43-1.65	mg/L	4	4	Water additive used to control microbes

Disinfection Byproducts	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
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Radionuclides	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
Combined Radium (-226 & -228)	5/11/2021	1.23	NA	pci/L	5	5	Erosion of natural deposits

Synthetic Organic Chemicals	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
No Detected Results were found in the year 2021							

Volatile Organic Chemicals	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
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- No violations reported in 2021.



# Lead

Water service lines that carry water to your home could contain lead. Corroding pipes can release lead into drinking water as it travels to your home. If present at elevated levels, lead can cause serious health problems, especially in children, infants and pregnant women.

## Reduce Your Exposure

If you live in an older home, consider having a licensed plumber check your plumbing for lead. If you are concerned about lead in your water, you may wish to have your water tested. Additional information on lead in drinking water, testing methods and steps to minimize exposure is available at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).



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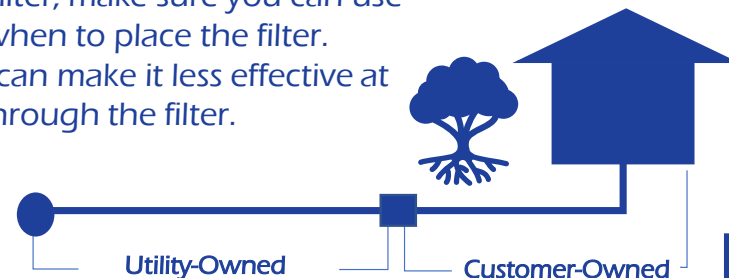
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# 2022 Annual Water Quality Report

Bluegrass Water Utility Operating Company  
Center Ridge Water District #3  
PWS ID KY0180502

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**BLUEGRASS WATER**  
Utility Operating Company  
A CSWR Managed Utility



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# Definition of Terms

**Action Level (AL):** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, that a water system must follow.

**Action Level Goal (ALG):** The level of a contaminant in drinking water below which there is no known or expected risk of health. ALGs allow for a margin of safety.

**Average (Avg):** Regulatory compliance with some MCLs are based on running annual average of monthly samples.

**Level 1 Assessment:** A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Level 2 Assessment:** A very detailed study of the water system to identify potential problems and determine (if Possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

# Definition of Terms

**Million fibers per Liter (MFL):** A measure of asbestos

**Millirems per Year (MREM):** A measure of radiation absorbed by the body

**Minimum Reporting Limit (MRL):** The smallest measured concentration of a substance that can be reliably measured by a given analytical method.

**Not Applicable (NA):** Sampling was not completed by regulation or was not required.

**Not Detected (ND):** Not detectable at reporting limit.

**Nephelometric Turbidity Units (NTU):** Measure of clarity or turbidity of the water.

**Picocuries per liter (pCi/L):** Measure of the natural rate of disintegration of radioactive contaminants in water.

**Parts per billion (ppb):** One part substance per billion parts water or microgram per liter ( $\mu\text{g/L}$ ).

**Parts per million (ppm):** One part substance per million parts water or milligram per liter ( $\text{mg/L}$ ).

**Parts per quadrillion (ppq):** Parts per quadrillion, or picograms per liter ( $\text{pg/L}$ )

**Parts per trillion (ppt):** One part substance per trillion parts water or nanograms per liter ( $\text{ng/L}$ ).

$\text{ppm} \times 1000 = \text{ppb}$   
 $\text{ppb} \times 1000 = \text{ppt}$   
 $\text{ppt} \times 1000 = \text{ppq}$

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

# Sources of Contaminants

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

## Contaminants That May be Present in Source Water:

Microbes	such as viruses and bacteria may come which may occur through sewage treatment plants, domesticated animals, or wildlife.
Inorganic Chemicals	such as toxic heavy metals and salts, which come from urban stormwater runoff, industrial waste discharges, oil and gas production, mining, or farming.
Pesticides & Herbicides	which may come from a variety of sources such as agricultural or stormwater runoff, and residential uses.
Organic Chemicals	including synthetic or volatile organic human-made compounds, such as dry-cleaning solvents, may occur due to disposal of untreated waste into septic systems or stormwater runoff.
Radioactive Contaminants	which can be naturally occurring or man-made may occur through weathering rock, mining, and runoff.

## Special Health Information:

Some people may be more vulnerable to contaminants in drinking water than the general population. Those who are undergoing chemotherapy or living with HIV/AIDs, transplants, children and infants, elderly, and pregnant women can be at particular risk for infections. If you have special health care needs, please consider taking additional precautions with your drinking water and seek advice from a health care provider. For more information visit [www.epa.gov/safewater/healthcare/special.html](http://www.epa.gov/safewater/healthcare/special.html).

# Water Quality Report

The following page will display the results of your water quality

- Central States and our Utility Operating Companies conduct extensive monitoring to determine if your water meets all water quality standards. The detections of our monitoring are reported in the following tables.
- Regulated contaminants not listed in this table, were not found in the treated water supply.



# Water Quality Results

2022 Water Quality Test Results							
Disinfectants and Disinfection By-Products	Violation Y or N	Running Annual Average (RAA)	Range of All Samples (Low-High)	MRDL	MRDLG	Collection Date	Likely Source of Contamination
Chlorine (ppm)	N	0.8	0.7-0.8	4	4	2022	Water additive used to control microbes
Lead and Copper	Violation Y or N	90 <sup>th</sup> Percentile	Number of Samples Exceeds AL	AL	ALG	Collection Date	Likely Source of Contamination
Lead (ppb)	N	4.4	0	15	0	2022	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Copper (ppm)	N	2.2	1	1.3	1.3	2022	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Radionuclides	Violation Y or N	Running Annual Average (RAA) OR Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Collection Date	Likely Source of Contamination
Combined Radium 226/228 (pCi/L)	N	1.23	N/A	5	0	5/11/2021	Erosion of natural deposits.
Inorganic Chemicals (IOC)	Violation Y or N	Running Annual Average (RAA) OR Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Collection Date	Likely Source of Contamination
Nitrate *measured as Nitrogen (ppm)	N	0.2	N/A	10	10	2022	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits.
<b>Health Language:</b>							
Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause "blue baby syndrome". Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, and detected nitrate levels are above 5 ppm, you should ask advice from your health care provider.							

Center Ridge Water District #3  
reported no violations in 2022.



# Lead

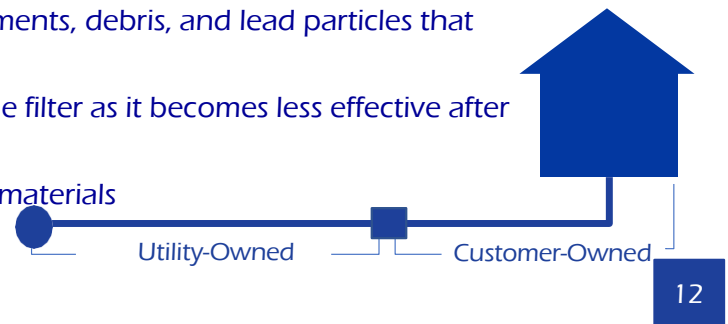
If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Confluence Rivers is responsible for providing high quality drinking water but cannot control the variety of plumbing materials. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking.

In compliance with Federal Regulation (40 CFR Part 141 Subpart 1) CSWR finds it necessary for the health and safety of our customers to adopt lead control standards which ban the use of lead materials in the public drinking water system and private plumbing connected to the public drinking water system. **No connection shall be installed or maintained where lead base materials were used in construction or modification of the drinking water plumbing after January 1, 1989. Contact CSWR immediately if you suspect you have lead plumbing.**

If you live in an older home or are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

## Reduce Your Exposure

1. **Flush your home's pipes** by running the tap before drinking the water. Residents should contact their water utility for recommendations about flushing times in their community.
2. **Use Cold water** only for drinking, cooking, and making baby formula. Boiling water does not remove lead.
3. **Clean your aerator** (screen of faucet) regularly to remove sediments, debris, and lead particles that naturally collect over time.
4. **Use a filter** that is certified to remove lead. Regularly replace the filter as it becomes less effective after expiration. Do not run hot water through the filter.
5. **Have a licensed plumber check your plumbing for lead-based materials**

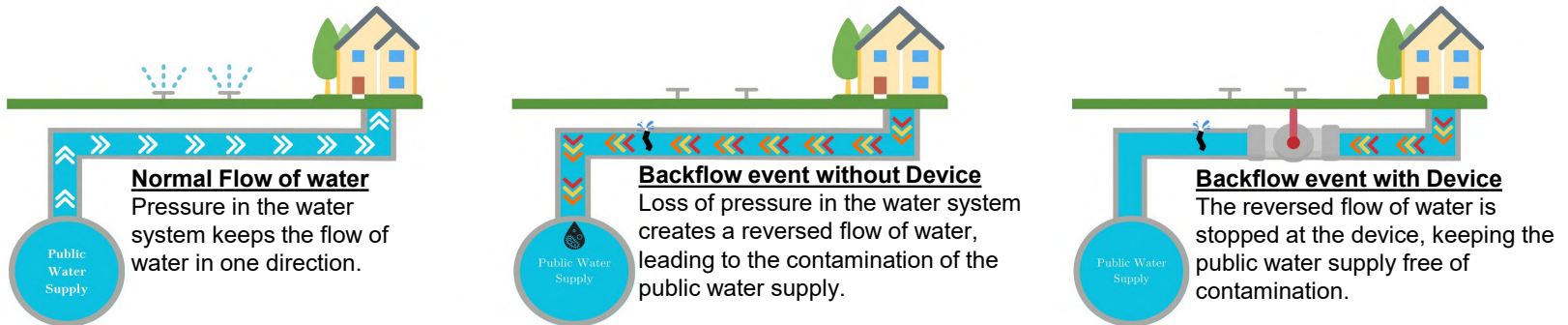


# Backflow Prevention

Backflow is the unwanted reversal of flow from a customer to the water supply. This is caused by a loss of pressure in the water supply line or an increase in pressure on the customer side. Common situations where backflow occurs are water main breaks or firefighting events. These events create low pressure in the distribution system. Backpressure can cause backflow when the pressure in a building exceeds the pressure in the water supply line, causing liquid from the customer's line to move into the water supply. Backflow Prevention Devices are designed to restrict the flow of water to one direction.

## Cross Connection

Cross-connections are links between a customer and the drinking water supply lines. Cross-Connections may contaminate the drinking water supply if there is a backflow event. Backflow through cross-connections are very serious and have the potential to cause serious health hazards.



## Common household items requiring installation of a Backflow Prevention Device

Lawn Irrigation/Sprinkler System, Pool, Hot Tub, Fire Protection Sprinklers and Boilers

If you have any questions about Backflow Prevention or would like to notify CSWR of your Backflow Devices, please call or email: Bluegrass Water Utility Operating Company at 1-866-752-8982 or [support@bluegrasswateruoc.com](mailto:support@bluegrasswateruoc.com)



# How to Participate

Protecting drinking water at its source is an important part of the process to treat and deliver high quality water. It takes a community effort to protect shared resources. This includes utilities, businesses, residents, government and non-profit organizations.

If you have any questions about this report or concerning your water utility, please contact Bluegrass Water at 1-866-752-8982.

## WATER INFORMATION SOURCES:

Central States Water Resources (CSWR)

<https://www.centralstateswaterresources.com/contact-us/>

Kentucky Energy and Environment Cabinet

<https://eec.ky.gov/>

United States Environmental Protection Agency (USEPA)

[www.epa.gov/safewater](http://www.epa.gov/safewater)

Safe Drinking Water Hotline (800) 426-4791

Centers for Disease Control and Prevention [www.cdc.gov](http://www.cdc.gov)

American Water Works Association [www.drinktap.org](http://www.drinktap.org)

Water Quality Association [www.wqa.org](http://www.wqa.org)

National Library of Medicine/National Institute of Health

[www.nlm.nih.gov/medlineplus/drinkingwater.html](http://www.nlm.nih.gov/medlineplus/drinkingwater.html)

## WHAT CAN YOU DO?



Properly dispose of pharmaceuticals, household chemicals, oils and paints.



Clean up heating or fuel tank leaks with cat litter. Sweep material and seal in bag. Check with local facility for disposal.



Clean up after your pets and limit the use of fertilizers and pesticides.



Take part in watershed activities or volunteer outreach programs.



# 2021 Annual Water Quality Report

**Bluegrass Utility Operating Company  
Center Ridge Water District #4  
KY0183106**

## **ATTENTION: Landlords and Apartment Owners**

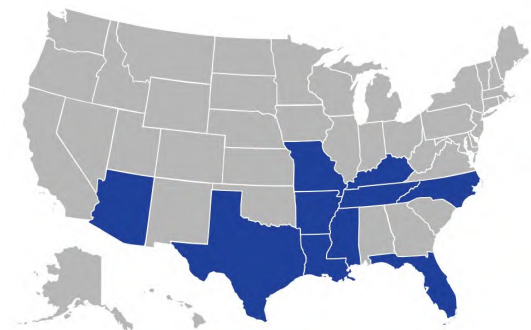
Please share a copy of this notice with your tenants. It includes important information about their drinking water quality.



**BLUEGRASS WATER**

Utility Operating Company

A CSWR Managed Utility



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### What is a Consumer Confidence Report (CCR)?

We proudly present our Annual Water Quality Report, also referred to as a CCR. CCRs provide customers with important information regarding the quality of their drinking water. They let customers know what contaminants, if any, were detected in their drinking water, as well as associated potential health effects. We are pleased to report the results of the laboratory testing of your drinking water during the calendar year of 2022. For your information, we have compiled a list of tables showing the testing of your drinking water during 2022.

# About Us

Central States Water Resources is transforming how water utilities work by using technology and innovation to quickly assess and invest in reliable infrastructure that meets or exceeds stringent state and federal safety standards, ensuring all communities across the U.S. have access to safe, clean and reliable water resources while protecting the aquifers, lakes, rivers and streams that are essential to our world.

## Our Mission:

Central States Water Resources is working to bring safe, reliable, and environmentally responsible water resources to every community in the U.S.

This report contains important information about the source and quality of your drinking water. If you would like a paper copy of the 2021 Report mailed to your home, please call  
**(855)-801-8440**

Este informe contiene información importante sobre la fuente y la calidad de su agua potable. Si desea recibir una copia escrita del informe anual de la calidad del agua del 2021 en su casa, llame al número de teléfono  
**(855)-801-8440**

# About Your Drinking Water Supply

## WHERE YOUR WATER COMES FROM

**Water Source:** Groundwater

**Source Water Assessment:** There are a total of thirty-five potential sources of contamination within the Center Ridge Water System's wellhead protection area. All of these potential sources have been identified as septic systems and are ranked as having a medium risk to contamination of the aquifer. The aquifer has been determined to have a medium risk ranking.

**Disinfection Treatment:** The water supplied to you is treated with Chlorine to maintain water quality in the distribution system.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

# Definition of Terms

**Action Level (AL):** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, that a water system must follow.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Maximum Residual Disinfectant Level (MRDL):** the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Nephelometric Units (NTU):** Measure of the clarity, or turbidity of the water.

**pH:** A measure of acidity, 7.0 being neutral.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

**NA:** Not Applicable

**ND:** Not Detected

**Picocuries per liter (pCi/L):** Measure of the natural rate of disintegration of radioactive contaminants in water.

**Parts per billion (ppb):** One part substance per billion parts water or microgram per liter ( $\mu\text{g/L}$ ).

**Parts per million:** One part substance per million parts water or milligram per liter ( $\text{mg/L}$ ).

**Parts per trillion (ppt):** One part substance per trillion parts water or nanograms per liter ( $\text{ng/L}$ ).

# Sources of Contaminants

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

## Contaminants That May be Present in Source Water:

Microbes	such as viruses and bacteria may come which may occur through sewage treatment plants, domesticated animals, or wildlife.
Inorganic Chemicals	such as toxic heavy metals and salts, which come from urban stormwater runoff, industrial waste discharges, oil and gas production, mining, or farming.
Pesticides & Herbicides	which may come from a variety of sources such as agricultural or stormwater runoff, and residential uses.
Organic Chemicals	including synthetic or volatile organic human-made compounds, such as dry-cleaning solvents, may occur due to due to disposal of untreated waste into septic systems or stormwater runoff.
Radioactive Contaminants	which can be naturally occurring or man-made may occur through weathering rock, mining, and runoff.

### Special Health Information:

Some people may be more vulnerable to contaminants in drinking water than the general population. Those who are undergoing chemotherapy or living with HIV/AIDs, transplants, children and infants, elderly, and pregnant women can be at particular risk for infections. If you have special health care needs, please consider taking additional precautions with your drinking water and seek advice form a health care provider. For more information visit [www.epa.gov/safewater/healthcare/special.html](http://www.epa.gov/safewater/healthcare/special.html).

# Water Quality Results

- Central States and our Utility Operating Companies conduct extensive monitoring to determine if your water meets all water quality standards. The detections of our monitoring are reported in the following tables.
- Some unregulated substances are measured, but MCLs have not been established by the government. These contaminants are shown for your information.
- Regulated contaminants not listed in this table were not found in the treated water

Microbiological	Collection Date	Positive	Violation (Y or N)	Unit	MCL	MCLG	Typical Source
No Detected Results were found in the year 2021							

Inorganic Chemicals	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
Cadmium	12/28/2020	0.001	NA	mg/L	0.005	0.005	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints

Lead and Copper	Collection Date	90th Percentile	Samples Exceeding AL	Unit	AL	Typical Source
Copper, Free	2021	0.1	0	mg/L	1.3	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	2017-2019	0	0	mg/L	0.015	Corrosion of household plumbing systems, Erosion of natural deposits

Nitrate/Nitrite	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
Nitrate	4/26/2021	0.4	NA	mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks, sew age; Erosion of natural deposits
Nitrite	4/26/2021	0.04	NA	mg/L	1	1	Runoff from fertilizer use; Leaching from septic tanks, sew age; Erosion of natural deposits

Disinfectants	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MRDL	MRDLG	Typical Source
Chlorine	8/1/2021	1.51	0.45-1.51	mg/L	4	4	Water additive used to control microbes

Disinfection Byproducts	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
NA							

Radionuclides	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
No Detected Results were found in the year 2021							

Synthetic Organic Chemicals	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
No Detected Results were found in the year 2021							

Volatile Organic Chemicals	Collection Date	Highest Test Result	Range of Sampled Results	Unit	MCL	MCLG	Typical Source
No Detected Results were found in the year 2021							



- No violations reported in 2021.



# Lead

Water service lines that carry water to your home could contain lead. Corroding pipes can release lead into drinking water as it travels to your home. If present at elevated levels, lead can cause serious health problems, especially in children, infants and pregnant women.

## Reduce Your Exposure

If you live in an older home, consider having a licensed plumber check your plumbing for lead. If you are concerned about lead in your water, you may wish to have your water tested. Additional information on lead in drinking water, testing methods and steps to minimize exposure is available at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).



1. **Run your water-** Before drinking, flush your home's pipes by running the tap, taking a shower, doing laundry, or dishes. Residents should contact their water utility for recommendations about flushing times in their community.



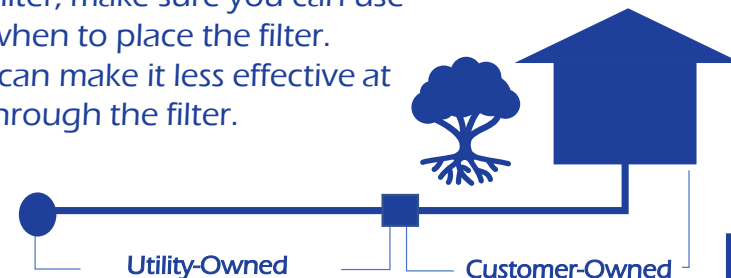
2. **Using cold water-** Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water.



3. **3. Clean your aerator-** Regularly clean your faucet's screen (aerator). Sediments, debris, and lead particles can collect in your aerator.



4. **4. Use your filter properly-** If you use a filter, make sure you can use a filter certified to remove lead. Know when to place the filter. Using the cartridge after it has expired can make it less effective at removing lead. Do not run hot water through the filter.



# How to Participate

Protecting drinking water at its source is an important part of the process to treat and deliver high quality water. It takes a community effort to protect shared resources. This includes utilities, businesses, residents, government and non-profit organizations.

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Properly dispose of pharmaceuticals, household chemicals, oils and paints.



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# 2022 Annual Water Quality Report

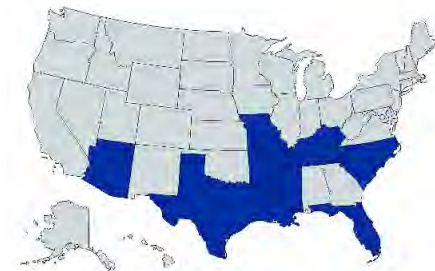
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PWS ID KY0183106

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**BLUEGRASS WATER**  
Utility Operating Company  
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Microbes	such as viruses and bacteria may come which may occur through sewage treatment plants, domesticated animals, or wildlife.
Inorganic Chemicals	such as toxic heavy metals and salts, which come from urban stormwater runoff, industrial waste discharges, oil and gas production, mining, or farming.
Pesticides & Herbicides	which may come from a variety of sources such as agricultural or stormwater runoff, and residential uses.
Organic Chemicals	including synthetic or volatile organic human-made compounds, such as dry-cleaning solvents, may occur due to disposal of untreated waste into septic systems or stormwater runoff.
Radioactive Contaminants	which can be naturally occurring or man-made may occur through weathering rock, mining, and runoff.

## Special Health Information:

Some people may be more vulnerable to contaminants in drinking water than the general population. Those who are undergoing chemotherapy or living with HIV/AIDs, transplants, children and infants, elderly, and pregnant women can be at particular risk for infections. If you have special health care needs, please consider taking additional precautions with your drinking water and seek advice from a health care provider. For more information visit [www.epa.gov/safewater/healthcare/special.html](http://www.epa.gov/safewater/healthcare/special.html).

# Water Quality Report

The following page will display the results of your water quality

- Central States and our Utility Operating Companies conduct extensive monitoring to determine if your water meets all water quality standards. The detections of our monitoring are reported in the following tables.
- Regulated contaminants not listed in this table, were not found in the treated water supply.



# Water Quality Results

2022 Water Quality Test Results							
Disinfectants and Disinfection By-Products	Violation Y or N	Highest Level Detected	Range of All Samples (Low-High)	MRDL	MRDLG	Collection Date	Likely Source of Contamination
Chlorine (ppm)	N	0.9	0.8-0.9	4	4	2022	Water additive used to control microbes
Lead and Copper	Violation Y or N	90 <sup>th</sup> Percentile	Number of Samples Exceeds AL	AL	ALG	Collection Date	Likely Source of Contamination
Lead (ppb)	N	3.5	0	15	0	2022	Erosion of natural deposits; Leaching from wood preservatives
Copper (ppm)	N	0.2	0	1.3	1.3	2022	Erosion of natural deposits; Leaching from wood preservatives
Radionuclides	Violation Y or N	Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Collection Date	Likely Source of Contamination
Combined Radium 226/228 (pCi/L)	N	0.79	0.79-0.79	5	0	5/11/2021	Erosion of natural deposits.
Inorganic Chemicals (IOC)	Violation Y or N	Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Collection Date	Likely Source of Contamination
Nitrate *measured as Nitrogen (ppm)	N	0.21	0.21-0.21	10	10	2022	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite *measured as nitrogen (ppm)	N	0.02	0.02-0.02	1	1	4/26/2021	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits.
<b>Health Language:</b>							
Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause "blue baby syndrome". Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, and detected nitrate levels are above 5 ppm, you should ask advice from your health care provider.							



# Notice of Violations

## Center Ridge Water District #4 2022 Violations

Violation Type	Explanation	Violation Date	Corrective Action
<u>CCR</u> Adequacy/Availability/Content	We failed to provide you an annual report that adequately informed you about the quality of our drinking water and the risks from exposure to contaminant detected in our drinking water.	2022	Along with the 2022 CCR, CSWR will provide customers with a compliant 2021 CCR.

Please share this information with other people who drink this water, especially those who may not have received this notice directly (for example, People in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

# Lead

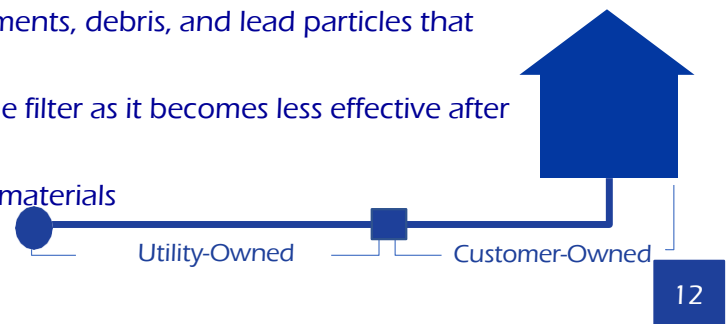
If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Confluence Rivers is responsible for providing high quality drinking water but cannot control the variety of plumbing materials. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking.

In compliance with Federal Regulation (40 CFR Part 141 Subpart 1) CSWR finds it necessary for the health and safety of our customers to adopt lead control standards which ban the use of lead materials in the public drinking water system and private plumbing connected to the public drinking water system. **No connection shall be installed or maintained where lead base materials were used in construction or modification of the drinking water plumbing after January 1, 1989. Contact CSWR immediately if you suspect you have lead plumbing.**

If you live in an older home or are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

## Reduce Your Exposure

1. **Flush your home's pipes** by running the tap before drinking the water. Residents should contact their water utility for recommendations about flushing times in their community.
2. **Use Cold water** only for drinking, cooking, and making baby formula. Boiling water does not remove lead.
3. **Clean your aerator** (screen of faucet) regularly to remove sediments, debris, and lead particles that naturally collect over time.
4. **Use a filter** that is certified to remove lead. Regularly replace the filter as it becomes less effective after expiration. Do not run hot water through the filter.
5. **Have a licensed plumber check your plumbing for lead-based materials**

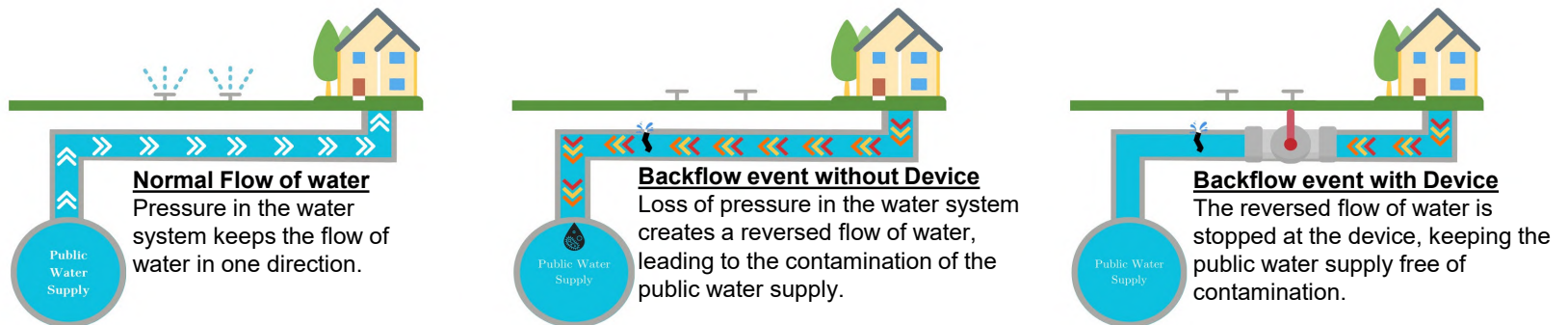


# Backflow Prevention

Backflow is the unwanted reversal of flow from a customer to the water supply. This is caused by a loss of pressure in the water supply line or an increase in pressure on the customer side. Common situations where backflow occurs are water main breaks or firefighting events. These events create low pressure in the distribution system. Backpressure can cause backflow when the pressure in a building exceeds the pressure in the water supply line, causing liquid from the customer's line to move into the water supply. Backflow Prevention Devices are designed to restrict the flow of water to one direction.

## Cross Connection

Cross-connections are links between a customer and the drinking water supply lines. Cross-Connections may contaminate the drinking water supply if there is a backflow event. Backflow through cross-connections are very serious and have the potential to cause serious health hazards.



## Common household items requiring installation of a Backflow Prevention Device

Lawn Irrigation/Sprinkler System, Pool, Hot Tub, Fire Protection Sprinklers and Boilers

If you have any questions about Backflow Prevention or would like to notify CSWR of your Backflow Devices, please call or email: Bluegrass Water Utility Operating Company at 1-866-752-8982 or [support@bluegrasswateruoc.com](mailto:support@bluegrasswateruoc.com)

# How to Participate

Protecting drinking water at its source is an important part of the process to treat and deliver high quality water. It takes a community effort to protect shared resources. This includes utilities, businesses, residents, government and non-profit organizations.

If you have any questions about this report or concerning your water utility, please contact Bluegrass Water at 1-866-752-8982.

## WATER INFORMATION SOURCES:

Central States Water Resources (CSWR)

<https://www.centralstateswaterresources.com/contact-us/>

Kentucky Energy and Environment Cabinet

<https://eec.ky.gov/>

United States Environmental Protection Agency (USEPA)

[www.epa.gov/safewater](http://www.epa.gov/safewater)

Safe Drinking Water Hotline (800) 426-4791

Centers for Disease Control and Prevention [www.cdc.gov](http://www.cdc.gov)

American Water Works Association [www.drinktap.org](http://www.drinktap.org)

Water Quality Association [www.wqa.org](http://www.wqa.org)

National Library of Medicine/National Institute of Health

[www.nlm.nih.gov/medlineplus/drinkingwater.html](http://www.nlm.nih.gov/medlineplus/drinkingwater.html)

## WHAT CAN YOU DO?



Properly dispose of pharmaceuticals, household chemicals, oils and paints.



Clean up heating or fuel tank leaks with cat litter. Sweep material and seal in bag. Check with local facility for disposal.



Clean up after your pets and limit the use of fertilizers and pesticides.



Take part in watershed activities or volunteer outreach programs.





# 2021 Annual Water Quality Report

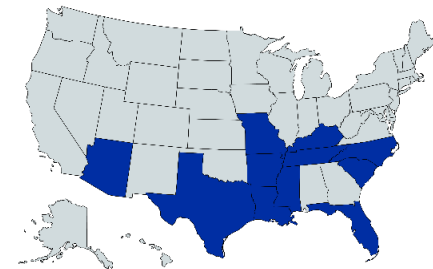
Bluegrass Water Utility Operating Company  
Center Ridge Water District #4  
PWS ID KY0183106

## ATTENTION: Landlords and Apartment Owners

Please share a copy of this notice with your tenants.  
It includes important information about their  
drinking water quality.



**BLUEGRASS WATER**  
Utility Operating Company  
A CSWR Managed Utility



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## What is a Consumer Confidence Report (CCR)?

We proudly present our Annual Water Quality Report, also referred to as a CCR. CCRs provide customers with important information regarding the quality of their drinking water. They let customers know what contaminants, if any, were detected in their drinking water, as well as associated potential health effects. We are pleased to report the results of the laboratory testing of your drinking water during the calendar year of 2022. For your information, we have compiled a list of tables showing the testing of your drinking water during 2022.

## About Us

Central States Water Resources is transforming how water utilities work by using technology and innovation to quickly assess and invest in reliable infrastructure that meets or exceeds stringent state and federal safety standards, ensuring all communities across the U.S. have access to safe, clean and reliable water resources while protecting the aquifers, lakes, rivers and streams that are essential to our world.

### **Our Mission:**

Central States Water Resources is working to bring safe, reliable, and environmentally responsible water resources to every community in the U.S.

This report contains important information about the source and quality of your drinking water. If you would like a paper copy of the 2022 Report mailed to your home, please call 1-866-752-8982

Este informe contiene información importante sobre la fuente y la calidad de su agua potable. Si desea recibir una copia escrita del informe anual de la calidad del agua del 2022 en su casa, llame al número de teléfono 1-866-752-8982

# About Your Drinking Water Supply

## WHERE YOUR WATER COMES FROM

**Water Source:** Groundwater

**Source Water Assessment:** There are a total of twenty-seven potential sources of contamination within the Center Ridge Water System's wellhead protection area. All the potential sources have been identified as septic systems and are ranked as having a medium risk to contamination of the aquifer. The aquifer has been determined to have a medium risk ranking.

**Disinfection Treatment:** The water supplied to you is treated with Chlorine to maintain water quality in the distribution system.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

# Definition of Terms

**Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must Follow.

**Action Level Goal (ALG):** The level of a contaminant in drinking water below which there is no known or expected risk of health. ALGs allow for a margin of safety.

**Average (Avg):** Regulatory compliance with some MCLs are based on running annual average of monthly samples.

**Level 1 Assessment:** A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Level 2 Assessment:** A very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum Residual Disinfectant Level (MRDL):** the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Millirems per Year (MREM):** A measure of radiation absorbed by the body.

**NA:** Not Applicable

**Parts per billion (ppb):** One part substance per billion parts water or microgram per liter ( $\mu\text{g/L}$ ).

**Parts per million (ppm):** One part substance per million parts water or milligram per liter ( $\text{mg/L}$ ).

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

# Sources of Contaminants

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

## Contaminants That May be Present in Source Water:

Microbes	such as viruses and bacteria may come which may occur through sewage treatment plants, domesticated animals, or wildlife.
Inorganic Chemicals	such as toxic heavy metals and salts, which come from urban stormwater runoff, industrial waste discharges, oil and gas production, mining, or farming.
Pesticides & Herbicides	which may come from a variety of sources such as agricultural or stormwater runoff, and residential uses.
Organic Chemicals	including synthetic or volatile organic human-made compounds, such as dry-cleaning solvents, may occur due to disposal of untreated waste into septic systems or stormwater runoff.
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Some people may be more vulnerable to contaminants in drinking water than the general population. Those who are undergoing chemotherapy or living with HIV/AIDs, transplants, children and infants, elderly, and pregnant women can be at particular risk for infections. If you have special health care needs, please consider taking additional precautions with your drinking water and seek advice from a health care provider. For more information visit [www.epa.gov/safewater/healthcare/special.html](http://www.epa.gov/safewater/healthcare/special.html).

# Water Quality Report

The following page will display the results of your water quality

- Central States and our Utility Operating Companies conduct extensive monitoring to determine if your water meets all water quality standards. The detections of our monitoring are reported in the following tables.
- Regulated contaminants not listed in this table, were not found in the treated water supply.



# Water Quality Results

2021 Water Quality Test Results							
Disinfectants	Violation Y or N	Highest Level Detected	Range of All Samples (Low-High)	MRDL	MRDLG	Collection Date	Likely Source of Contamination
Chlorine (ppm)	N	0.8	0.7 - 0.8	4	4	2021	Water additive used to control microbes
Lead and Copper	Violation Y or N	90 <sup>th</sup> Percentile	Number of Samples Exceeds AL	AL	ALG	Collection Date	Likely Source of Contamination
Copper (ppm)	N	0.26	0	1.3	1.3	2021	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	N	5.8	0	15	0	2021	Corrosion of household plumbing systems; Erosion of natural deposits
Radionuclides	Violation Y or N	Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Collection Date	Likely Source of Contamination
Combined Radium 226/228 (pCi/L)	N	0.79	0.79 - 0.79	5	0	2021	Erosion of natural deposits.
Inorganic Chemicals (IOC)	Violation Y or N	Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Collection Date	Likely Source of Contamination
Fluoride (ppm)	N	0.06	0.06 - 0.06	4	4	2021	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (ppm)	N	0.2	0.18 - 0.2	10	10	2021	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite (ppm)	N	0.02	0.02 - 0.02	1	1	2021	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits.
<b>Health Language:</b>							
Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause "blue baby syndrome". Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, and detected nitrate levels are above 5 ppm, you should ask advice from your health care provider.							
Some People who drink water containing radium 226 and/or 228 in excess of the MCL over many yearshave an increased risk of getting cancer.							