### BEFORE THE MISSISSIPPI PUBLIC SERVICE COMMISSION

**TESTIMONY** 

**OF** 

**JACOB FREEMAN** 

ON BEHALF OF

GREAT RIVER UTILITY OPERATING COMPANY, LLC

2025 FRP ANNUAL REPORT

**February 28, 2025** 

1	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.	
2	A.	My name is Jacob Freeman. My business address is 1630 Des Peres Road, Suite 140, St.	
3		Louis, Missouri, 63131.	
4	Q.	WHAT IS YOUR POSITION WITH GREAT RIVER UTILITY OPERATING	
5		COMPANY?	
6	A.	I am Director of Engineering of CSWR, LLC ("CSWR"), the affiliated company	
7		responsible for providing management services and oversight to Great River Utility	
8		Operating Company, LLC ("Great River" or "Company") and all its affiliated utility	
9		operating companies. More specifically, I oversee all engineering, surveying, and facility	
10		construction for all newly acquired CSWR-affiliated water and wastewater utilities. I also	
11		oversee capital upgrades for those utilities.	
12	Q.	HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE MISSISSIPPI PUBLIC	
13		SERVICE COMMISSION?	
14	A.	Yes.	
15	Q.	PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL	
16		EXPERIENCE.	
17	A.	I hold a Bachelor of Science degree in Mechanical Engineering from the University of	
18		Missouri - Columbia. I am a licensed Professional Engineer in the states of Missouri,	
19		Illinois, and Kansas.	
20		Before joining CSWR in January 2019, I was employed for two years by Corrigan	
21		Mechanical, a design-build mechanical contractor in St. Louis, Missouri. In that position	
22		my responsibilities included designing, estimating, and managing plumbing, HVAC, and	

Direct Testimony of Jacob Freeman
On Behalf of Great River Utility Operating Company, LLC
Page 2 of 20

1		process piping construction projects in Missouri and southern Illinois. After leaving that	
2		position, I spent eleven years performing similar tasks for Brotcke Well & Pump, one of	
3		the Midwest's largest well and pump service contractors, servicing wells and water	
4		treatment equipment throughout Missouri, Illinois, Kentucky, and Kansas. Immediately	
5		prior to leaving Brotcke, I served as Vice President and Principal in charge of all the	
6		company's engineering services. I also managed Brotcke's regional office in Kansas City	
7		Missouri.	
8	Q.	WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS CASE?	
9	A.	The purpose of my testimony is to provide support for the capital additions and	
10		improvements underlying the Company's rate base analysis in its 2025 FRP Annual	
11		Report. I intend to support the testimony of Mr. Brent Thies, the Vice President and	
12		Corporate Controller of CSWR by generally highlighting the regulatory, operational, and	
13		technical issues Great River has encountered at the facilities acquired to date and describing	
14		the activities conducted and costs incurred in the Test Year to address these issues.	
15	Q.	DO YOU SPONSOR ANY EXHIBITS WITH YOUR TESTIMONY?	
16	A.	Yes. I am sponsoring the following exhibits with my testimony:	
17		- Exhibit JF-1: ASCE Mississippi Infrastructure Report Care-2024	
18		- Exhibit JF-2.1: Completed Construction Summary-Water	
19		- Exhibit JF-2.2: Completed Construction Summary-Sewer	
20	Q.	PLEASE DESCRIBE GREAT RIVER'S CURRENT OPERATIONS IN	
21		MISSISSIPPI.	
22	A.	Great River currently provides water and wastewater service to over 120 different systems	
23		in Mississippi. A map showing the Great River's geographically dispersed Mississippi	

1		service areas is attached as Exhibit TT-1 to the direct testimony of Senior Vice President
2		Todd Thomas.
3	Q.	PLEASE SUMMARIZE GREAT RIVER'S BUSINESS MISSION AND HOW
4		THAT MISSION IS BENEFICIAL TO MISSISSIPPI.
5	<b>A.</b>	Great River's mission is to transform water and wastewater utilities to provide safe,
6		reliable, and environmentally responsible water resources to every community in the State.
7		In furtherance of this mission. Great River is transforming how water and wastewater
8		utilities work by using technology and innovation to quickly assess and invest in reliable
9		infrastructure that meets or exceeds stringent state and federal safety standards, ensuring
10		that Mississippi communities all over the State have access to safe, clean and reliable water
11		resources while protecting the aquifers, lakes, rivers and streams that are essential to the
12		States and its citizens.
13		The general health of Mississippi's water and wastewater infrastructure is poor. The
14		American Society for Civil Engineers' ("ASCE") 2024 Mississippi Infrastructure Report
15		Card, attached to my testimony as Exhibit JF-1, grades both Mississippi's drinking water
16		and wastewater infrastructure with a D- (poor). This score has worsened from the D grade
17		issued in 2020. Mississippi is not alone; in ASCE's 2021 U.S. Infrastructure Report Card,
18		the entire country's drinking water infrastructure was given a C- and its wastewater
19		infrastructure was given a D+.1
20		Consistent with this study, the systems Great River acquired and those it hopes to
21		acquire in Mississippi are typically poorly managed, and almost all the owners of those
22		systems did not or do not have the technical, managerial, and financial ability to make

<sup>&</sup>lt;sup>1</sup> See https://infrastructurereportcard.org/

capital investments and operational improvements necessary to ensure regulatory
compliance and provide safe, efficient, and reliable service to customers. Great River's
acquisition changed all that. As described in Mr. Thomas' testimony, professional,
experienced, and licensed professionals now oversee the operation and maintenance of
these systems. And Great River has made plant investments necessary to significantly
improve service and set systems on a path that will ensure they will fully comply with
federal, state, and local laws and regulations.

The Commission recognized the current infrastructure crisis plaguing Mississippi and Great River's capacity and willingness to deploy the capital, expertise and technology to start to tackle this growing issue:

The Consequences of poor infrastructure to customers and the general public are well documented. Aging and poorly maintained infrastructure pose an environmental risk to the State's rivers and streams, a health risk to its residents, and poor service reliability and high operating costs to customers. Aging and poorly performing infrastructure can only be cured through new capital investment, regular and diligent maintenance, and efficient management and operations. For public entities, required new capital is raised through tax increases or privatization. For private entities, like the systems that are the subject of this docket, the primary option is private capital markets. The Commission is persuaded that the general circumstances concerning the State's infrastructure and the specific facts of this case, namely the scalability and centralized operations of various systems under consolidated ownership, justify the adoption of a policy that will incentivize responsible, experienced and well-capitalized companies like Great River to acquire old, out-of-compliance systems so that they can be rehabilitated and operated reliably and in compliance with everincreasing environmental regulations. The Commission believes that incentivizing consolidations in the private water and sewer sector, when the circumstances justify it, will improve the quality of life for all Mississippians and enhance reliability and satisfaction for utility customers.

Turning to the facts of this case, the circumstances are quite compelling. Most if not all of the systems being acquired are decades old. Great River's due diligence to date indicate many are in disrepair. Many of the current owners/operations are or have been in [and] out of regulatory compliance. In fact, the Commission need not look further than the fact that nine

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21 22

23

24

25

26

2728

29

30

31

32

33

1 wastewater systems being acquired currently operate without rates 2 approved by tis Commission and the majority of the sellers have failed to 3 comply with the Commission's simple and straightforward annual reporting 4 requirements. The Commission has the experience to know that the reasons 5 for this non-compliance vary and often times are not malicious. 6 Nonetheless, the evidence is clear that vast room for improvement exists. 7 Finally, while not presented as evidence by Great River, this Commission 8 will note that it has received customer complaints of poor service concerning some of the systems that are the subject of this docket.<sup>2</sup> 9 10

# Q. PLEASE DESCRIBE THE GENERAL NATURE AND CONDITION OF THE WASTEWATER COLLECTION SYSTEMS ACQUIRED BY GREAT RIVER.

The wastewater collection systems acquired by Great River generally consist of gravity and low-pressure collection systems, and sometimes a combination of the two, often with lift stations that aide in transporting wastewater to the treatment facility. In general, the low-pressure collection systems acquired by Great River were in fair condition. These low-pressure conveyance systems typically do not require lift stations and are not subject to inflow and infiltration, because any break in the line will cause a notable, pressurized leak and will quickly be repaired, even under the generally less reliable operations and maintenance performed by historical ownership groups.

Gravity collection, however, typically has more issues. Gravity collection systems often have damage that has not been noted by previous owners and has been left unchecked, leading to stormwater or groundwater inflow and infiltration, which increase flows to the plant. Additionally, gravity collection systems often require lift stations to convey wastewater to the treatment plant. The typical condition of the lift stations at facilities acquired by Great River was in failed or very poor condition. Broken or missing equipment was routine, and most facilities had little or no system control and no remote monitoring.

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

A.

<sup>&</sup>lt;sup>2</sup> Final Order, Docket No. 2020-UA-143 ¶41 & 42 (June 8, 2021).

Additionally, nearly all lift stations the Company has acquired had significant accumulation
of solids, reducing the capacity of the wet wells, potentially damaging internal equipment
like pumps, or causing backups or sanitary sewage overflows which could negatively
impact residents.

# 5 Q. PLEASE DESCRIBE THE GENERAL NATURE AND CONDITION OF THE 6 DRINKING WATER SYSTEMS ACQUIRED BY GREAT RIVER.

Nearly all of the drinking water systems acquired by Great River to date were typical groundwater production systems – i.e., they owned their own groundwater wells with disinfection and other treatment and included storage and distribution systems. A few systems acquired purchased drinking water from a nearby publicly-owned system and is therefore a distribution-only drinking water system. In general, the condition of water production facilities was at least operational. Well equipment, however, was often reaching the end of its useful life, controls were nonexistent or mostly obsolete, and none of the systems had remote monitoring equipment on wells. One system included a water well connected to the system which had never been approved for production of domestic drinking water, a violation of Mississippi Department of Health regulations. Another system's secondary well was rendered a complete loss due to a lightning strike and casing/screening failure prior to acquisition. Disinfection equipment generally had failed or was in poor condition, often lacking backup chemical feed pumps which can result in unsafe water with a simple pump failure, and most of the storage equipment needed inspection and repair. Most of the water tankage, at a minimum, required sanding and/or painting to extend the structural life of the storage equipment. Some of these systems also had inadequate water storage to ensure safe and reliable water supply for customers. Some

1

2

3

4

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

A.

1		systems had no functioning backup power, emergency service plans, or ability to connect	
2		backup power on site at acquisition. The distribution systems generally were in working	
3		condition with some notable exceptions where significant improvements were needed.	
4		Generally, distribution systems were in need of additional isolation valves to minimize	
5		customer impact in the event of a line break, and needed flushing valves or hydrants	
6		installed for distribution system maintenance. Some systems had a number of leaks	
7		requiring repair shortly after acquisition.	
8	Q.	PLEASE GENERALLY DESCRIBE THE PROCESS OF EVALUATING THE	
9		IMMEDIATE COMPLIANCE NEEDS OF THE SYSTEMS ACQUIRED BY	
10		GREAT RIVER.	
11	A.	Great River begins its evaluation of each system prior to acquisition and continues its	
12		analysis of the immediate needs of the acquired system post-closing during an initial	
13		stabilization period. Prior to acquiring a system, Great River will routinely undertake	
14		certain due diligence including the preparation of a third-party engineering	
15		memorandum. This memorandum will seek to assess the condition of the system, the	
16		condition of any equipment including the absence of necessary equipment, and necessary	
17		operational changes that will need to be made.	
18		However, many improvements and upgrades only become known once Great River	
19		has had the opportunity to operate the system for a period of time. By definition,	
20		operational improvements and upgrades can only be made to systems that Great River	
21		already owns and operates. Therefore, while necessary engineering improvements may	
22		already be known and scheduled for systems yet to close, operational improvements can	

only be made once a system is owned and under Great River's operation. Where the

1		operational changes involve engineering changes or issues that will need to be permitted,
2		those improvements will flow through the Company's engineering department; otherwise,
3		operational improvements are made as soon as practicable by the operations team post-
4		acquisition.
5		Once a system is acquired and during the initial stabilization period, Great River
6		evaluates the immediate compliance needs for the acquired system and makes the
7		necessary investment and improvements to stabilize the system and bring its operation into
8		compliance with applicable federal and state regulations. To properly assess the required
9		improvements for each acquired system, Great River reviews the compliance history of
10		each system, physically visits and evaluates the condition of the facilities at each system
11		and works with local engineers and operators to develop plans to remediate the issues
12		discovered at each facility. The majority of the systems acquired by Great River require
13		numerous repairs and improvements in order to bring the systems into compliance.
14	Q.	APART FROM PHYSICAL PLANT ISSUES, WHAT GENERAL REGULATORY
15		NONCOMPLIANCE ISSUES WERE ENCOUNTERED AT THE FACILITIES
16		GREAT RIVER ACQUIRED AND WHAT IS DONE TO RESOLVE THESE
17		ISSUES?
18	A.	In addition to the physical plant issues I described previously, many of the facilities Great
19		River acquired have exhibited regulatory compliance issues. Great River immediately
20		takes steps to ensure these non-compliance issues are resolved and that the facilities remain
21		in good standing with environmental regulators.
22		Several wastewater facilities had consistently reported "no-discharge" on discharge
23		monitoring reports leading up to acquisition by Great River. All these facilities were on

either an annual or semiannual sampling schedule. Therefore, a "no-discharge" report
would imply that at no time during the 6-12 month period covered by the report had
wastewater discharged from the facility. As a result, no effluent was tested for compliance
with permit limits. Despite this reporting, due diligence visits indicated that the majority
of these facilities were found to be discharging continuously and have discharged since
acquisition by Great River, likely indicating that these facilities have always discharged
and that the "no-discharge" reporting by the previous ownership was erroneous. While it
is possible that at some point during the year the previous operators or owners observed a
period where there was no discharge from the facilities, it is not possible that these facilities
did not discharge at any point during the annual sampling period as the discharge
monitoring reports indicated. The practice of reporting false information on a discharge
monitoring report indicates noncompliance with environmental regulation and permit
requirements.

On the other hand, many of the other wastewater facilities have reported discharges, completed annual testing, and showed compliance with permit limits in their DMR reporting. Nevertheless, Great River became concerned that this testing was failing to capture periods of noncompliance at the facilities. Based on the experience of Great River's parent company in the other states in which it operates, and given the current condition of the systems, many of these facilities would not be expected to consistently comply with permitted limits. Further investigation showed that most small facilities are only required by the MDEQ to complete sampling once or twice annually rather than the monthly or quarterly sampling that is required in many states. This sampling schedule has allowed facilities to choose to sample only when the plant is in the most ideal conditions to meet

permitted limits (usually in the warm months of the summer). As a result, a facility that is
not meeting permit limits most of the time can have a testing history that indicates no
violations and consistent compliance with permitted limits. Despite the sampling schedule
on many of the permits, the language of the permits and the language of the federal Clean
Water Act make it clear that facilities are expected to always comply with permitted limits,
and not just meet limits when sampled at the most ideal moments. A facility that exceeds
its permitted limits is, by definition, out of compliance with environmental limits, even if
the sampling schedule was not robust enough to document the noncompliance. Such a
facility should undergo repairs, improvements, and operational improvements until it is
able to consistently comply with permitted limits. Based upon previous experience with
poorly operated or maintained facilities in other states, Great River's parent company
suspected that many of the recently acquired facilities fit this category of undocumented
noncompliance.
Despite the MDEQ sampling requirements, Great River began regular sampling at
recently acquired wastewater facilities. The sample results demonstrated that many

Despite the MDEQ sampling requirements, Great River began regular sampling at recently acquired wastewater facilities. The sample results demonstrated that many facilities were not capable of consistent compliance with permitted limits. This confirms that while the official compliance history indicated that these plants had a history of compliance, they were regularly exceeding permitted limits which would dictate improved operations, repairs, and/or process improvements to ensure compliance with their permits and state and federal regulations.

Q. DOES GREAT RIVER CONSULT WITH THE MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY WHEN ADDRESSING COMPLIANCE ISSUES RELATED TO NEWLY ACQUIRED WASTEWATER SYSTEMS?

1	A.	Yes. Before Great River begins operations in Mississippi, it engages with the Mississippi	
2		Department of Environmental Quality ("MDEQ"): (1) to identify current problems at the	
3		facilities that it seeks to acquire, (2) to determine the remedial measures necessary to bring	
4		the facilities into compliance, and (3) to establish a schedule for addressing and completing	
5		the remedial measures required for the system. For most of the systems acquired to date	
6		in Mississippi, Great River and MDEQ have entered into compliance agreements	
7		specifying the short- and long-term steps required for Great River to bring those facilities	
8		into compliance. Great River intends to enter into similar arrangements for all future	
9		wastewater systems acquired in Mississippi.	
10	Q.	DO YOU HAVE EVIDENCE THAT DEMONSTRATES THE NATURE OF THE	
11		PROBLEMS ENCOUNTERED BY GREAT RIVER WHEN IT ACQUIRES A	
12		MISSISSIPPI SYSTEM?	
13	A.	Yes. A video showing the problems that Great River confronts as well as some of the	
14		improvements and rehabilitation work that Great River has performed can be found at:	
15		https://vimeo.com/913149398?share=copy.	
16	Q.	PLEASE SUMMARIZE THE COSTS INCURRED IN THE TEST YEAR BY	
17		GREAT RIVER TO ADDRESS THE ISSUES DESCRIBED IN YOUR	
18		TESTIMONY.	
19	A.	Summaries of the construction completed at the systems acquired by Great River as of the	
20		end of the Test Year are provided and incorporated herein as Exhibit JF-2.1 for water	
21		systems and Exhibit JF-2.2 for wastewater systems.	
22	Q.	ARE THE COSTS INCLUDED IN THE FRP ANNUAL REPORT FILING JUST	
23		AND REASONABLE?	

1	A.	Yes. The costs included in the Company's filing were prudently incurred and necessary to	
2		bring the systems acquired by Great River within regulatory compliance and/or improve	
3		their operational safety and efficiency.	
4	Q.	DOES THIS CONCLUDE YOUR TESTIMONY?	
5	A.	Yes.	

#### BEFORE THE MISSISSIPPI PUBLIC SERVICE COMMISSION

GREAT RIVER UTILITY OPERATING COMPANY, LLC WC-123-2514-00

DOCKET NO	
-----------	--

IN RE: GREAT RIVER UTILITY OPERATING COMPANY, LLC 2025 FRP ANNUAL REPORT

#### **AFFIDAVIT OF JACOB FREEMAN**

PERSONALLY appeared before the undersigned officer authorized to administer oaths, JACOB FREEMAN, who being duly sworn, deposes and says; that foregoing direct testimony was prepared by him or under his supervision; that said testimony was prepared for use as direct testimony on behalf of GREAT RIVER UTILITY OPERATING COMPANY, LLC in the above captioned proceeding; that the facts stated therein are true to the best of his knowledge, information and belief; and that if asked the questions appearing therein, his answers, under oath, would be the same.

Dated at St. Louis, Missouri, this the & day of February, 2025.

JACOB FREEMAN

Sworn to and subscribed before me this the 26 day of February, 2025.

Notary Public

My Commission Expires:

04-10-2027

ROSHAWNE VALLANDINGHAM Notary Public - Notary Seal Jefferson County - State of Missouri Commission Number 23414639 My Commission Expires Apr 10, 2027