

MEMORANDUM

TO: Missouri Public Service Commission
Official Case File, Case No. WA-2022-0361
Missouri-American Water Company

FROM: Sherrye Lesmes – Auditing Department
Angela Niemeier – Auditing Department
Charles Thomason – Customer Experience Department
Brodrick Niemeier – Engineering Analysis Department
Andrew Harris – Water, Sewer & Steam Department
Keri Roth – Water, Sewer & Steam Department

<u>/s/ Keri Roth</u>	<u>9/26/2022</u>	<u>/s/ Eric Vandergriff</u>	<u>9/26/2022</u>
Senior Research/Data Analyst	Date	Staff Counsel's Office	Date

SUBJECT: Staff Recommendation to Approve Certificate of Convenience and Necessity

DATE: September 26, 2022

Case Background

On June 21, 2022, Missouri-American Water Company (“MAWC”) filed an *Application and Motion for Waiver and Motion for Expedited Treatment* (“Application”) with the Missouri Public Service Commission (“Commission”) requesting permission to purchase all of the currently unregulated water assets owned by Pom-Osa Heights Subdivision (“Pom-Osa”) to provide water utility service. The proposed purchased price is \$10,000. Additionally, MAWC requests a Certificate of Convenience and Necessity (“CCN”) to own, acquire, construct, operate, control, manage and maintain the water system, which is located in Benton County.

On June 22, 2022, the Commission issued its *Order and Notice* and its *Corrected Order and Notice* directing notice of the application be given to the County Commission of Benton County, Missouri, setting a deadline for intervention requests, and directing filing of the staff recommendation or status report. On July 25, 2022, Staff filed its *Proposed Date when Staff will File its Recommendation*, requesting the Commission establish a filing date for Staff’s Recommendation of September 26, 2022. On July 25, 2022, the Commission issued its *Order Directing Staff to File a Recommendation*, setting a deadline for Staff to file its Recommendation no later than September 26, 2022. No parties sought to intervene in the case, and to date, no one has entered a public comment in this docket.

Background of Pom-Osa Heights Subdivision

Pom-Osa is located in Benton County, Missouri, just south of the City of Warsaw. According to the Application, the Homeowners’s Association (“HOA”) of Pom-Osa owns the water system for the subdivision. On September 12, 2020, the HOA board passed a motion to move forward with the sale of the Pom-Osa water system to MAWC.

Also, according to the Application, there are approximately 60 customers¹ with water service. There is very little opportunity for the expansion of service to additional customers. Currently, the system is unmetered.

For sewer disposal, each home in the Pom-Osa subdivision has its own on-site septic system, which is owned and maintained by the customer.

Background of MAWC

MAWC is an existing regulated water and sewer utility currently providing water service to more than 474,000 customers and sewer service to more than 16,500 customers in several service areas throughout Missouri. In recent years, MAWC has acquired several small existing water and sewer systems.

MAWC is a subsidiary of American Water Works Company, Inc. (“American Water”), and is affiliated with other American Water companies that undertake some of the tasks associated with utility service, such as customer billing, and share technical resources. MAWC has no overdue Commission annual reports or assessment fees.

Staff’s Investigation

Staff from the Water, Sewer and Steam Department investigated the condition of Pom-Osa’s water system, including its performance and compliance with drinking water regulations. Staff also reviewed information from the Department of Natural Resources (“DNR”) records, including the operating permit and inspection records. The system is identified as a Public Water System by permit number MO3036133, issued May 14, 2015, and requires an operator certification level of DS-1. MAWC has provided an appropriately certified operator to operate the system during the application process and the system is operating in compliance with the permit.

Staff performed an on-site inspection of the water system on July 22, 2022. The inspection included an on-site review of the current condition of the system and a discussion with MAWC personnel on proposed future operations and improvements. MAWC has shown that it has the technical ability to operate the system by providing a certified system operator to operate the system. As there is very little opportunity for system growth, the requested service area does not extend to nearby homes that are beyond the subdivision footprint. Staff requested a minor revision to the service area map filed with the application. This revision will add a detail inset to better illustrate the system location. MAWC staff has agreed to this request and will file the revised map along with the other revised tariff sheets. Staff accepted the legal description as filed without need for revision.

Description of Water System and Staff Observations

The drinking water system includes two wells (Well #1 and Well #2), a 10,000 gallon standpipe storage tank, one well house, and a water distribution system. There is currently no disinfection

¹ Staff DR0028 states 62 customers.

equipment. Well house #2 contains a meter, a booster pump, four (120 gallons/each) hydropneumatic tanks providing typical system pressure ranging from 62 to 64 psi, piping controls and electrical controls. Staff observed that the system was a mix of equipment and structures that ranged from the original construction in the 1950s to more recent installation of Well #2 electrical controls and emergency generator connection availability for backup pumping power provision. Well #1 has not been recently operated and will require evaluation for availability as a back-up source. Overall, the system appeared to be well maintained, and was in good condition at the time of inspection. While E. coli has not been detected, recent positive coliform sample results indicate the need for the addition of disinfection. If granted a CCN, MAWC is proposing the addition of disinfection, among other improvements listed below.

Proposed Improvements for the Water System

Staff's review of the Application, data request responses, and discussions with MAWC personnel indicate that, at this time, MAWC has a few planned improvements to the Pom-Osa system:

- Install a disinfection system using sodium hypochlorite
- Install meters and meter pits
- Install flushing valves in each of the three zones of the distribution system
- Relocate the Well #1 controls outside of the current building that is owned by a resident

Depreciation

In Case No. WR-2020-0344, the Commission ordered water depreciation rates applicable to all divisions of MAWC. Staff recommends the use of these rates for all plant in the Pom-Osa service area.

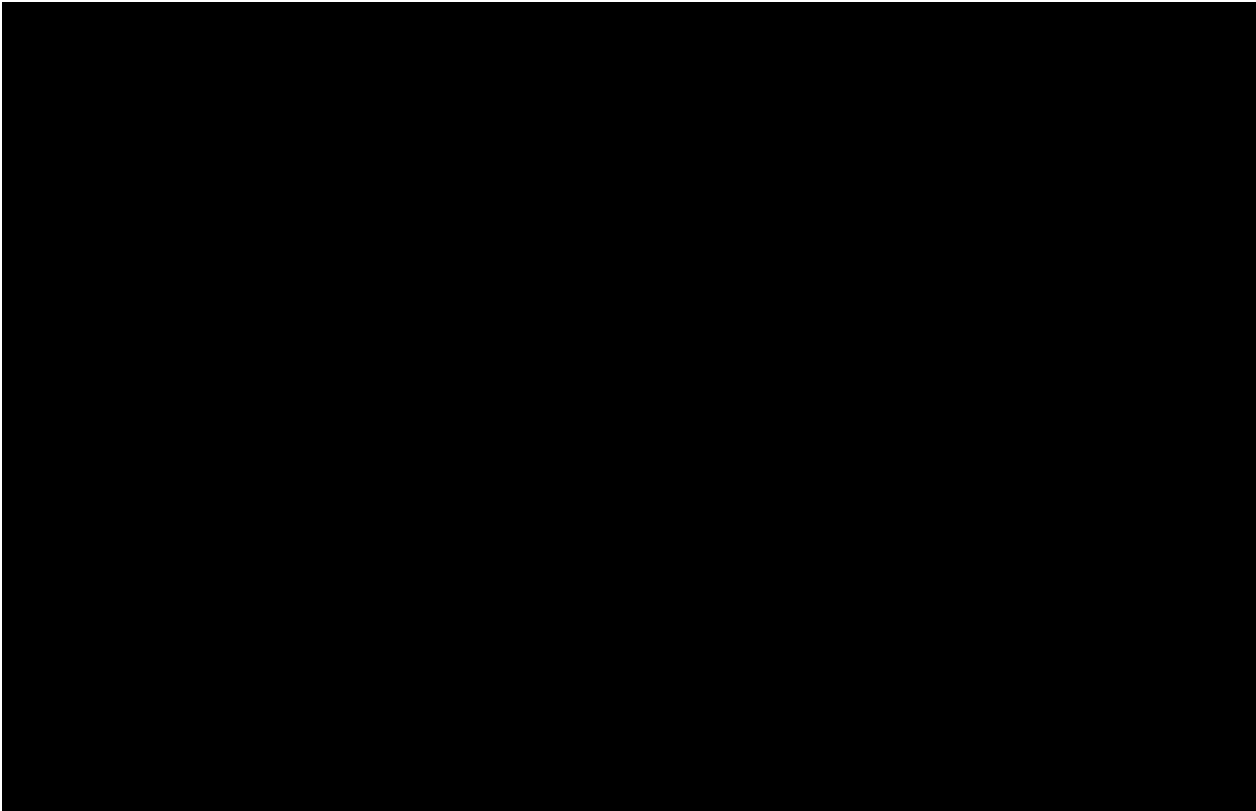
Rate Base

Normally, the Auditing Department would review plant-in-service records maintained by the Pom-Osa Heights Subdivision for the Pom-Osa water system to determine the current net book value of Pom-Osa's assets. However, in this case, the records were not available for review. It is Staff's understanding that the Pom-Osa water system assets, which date back to 1955, are contributed plant. Based on age, the contributed assets are presumed to be fully depreciated, resulting in a net zero rate base value for those assets. In the feasibility study for Pom-Osa Heights Subdivision, MAWC also listed the contributed assets as zero rate base. MAWC indicated it was unable to obtain from the subdivision any invoices or supporting documentation of original cost and installation for any plant assets of the Pom-Osa water system, which includes the 2007 and 2018 improvements. Therefore, Staff's calculations are based on estimated values from Staff's Engineering Analysis Department. Staff determined the net book value of the system to be \$85,391.

MAWC, in preparing its confidential Feasibility Study for this case, used similar systems it owns, engineering assessments, and due diligence visits to estimate the value of the water system plant at

today's cost, which MAWC then converted to an estimate of what it cost at the time MAWC believes the plant was originally placed in service. MAWC then calculated the depreciation reserve from 1955 to 2022, resulting in a net plant valuation. As will be discussed below, Staff also calculated an estimate of the current value of Pom-Osa's assets. Following are the estimates as calculated by MAWC and Staff for the original cost and the net book value:²

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The proposed purchase price of \$10,000 is \$75,391 below Staff's calculation of the net book value at September 30, 2022, of the Pom-Osa water system assets. Staff's estimated rate base is presented for information purposes only. A Commission decision regarding the rate base level in this case is not necessary. If the Commission approves this CCN and MAWC acquires the Pom-Osa water system, then Staff expects an updated rate base level, for this system, will be established in MAWC's currently filed general rate case, pending the closing date of the acquisition..

Publicity and Customer Notice

According to information MAWC provided to Staff, the Pom-Osa HOA held a meeting on September 12, 2020 and its board passed a motion to move forward with the sale of the Pom-Osa

² MAWC values taken from Attachment f-c of application.

water system to MAWC.³ The HOA is composed of all 62 residents who are served by the current water system and one additional member who uses a private well.

Customer Experience

MAWC's customer service team will handle Pom-Osa customers. Pom-Osa customers may contact MAWC customer service toll-free at 1-866-430-0820 from 7:00 a.m. to 7:00 p.m., Monday through Friday, with 24/7 coverage for emergencies. Customers may also communicate with MAWC by email at welcomemoaw@amwater.com or social media via Facebook, LinkedIn, Instagram, Twitter, and YouTube. Although it is currently closed, MAWC proposes in the future to utilize a business address at 1705 Montserrat Park, Warrensburg, MO 64804 to serve Pom-Osa customers. Customers will be able to visit the office from 7:30am-4:00pm, Monday through Friday. In its July 21, 2022 *Order Approving Transfer of Assets and Granting Certificate of Convenience and Necessity* for in Case No. WA-2022-0229, the Commission ordered MAWC to "file a notification in this case in EFIS when it opens its business office at 1705 Montserrat Park, Warrensburg, MO 64093." At the time of this memo's filing MAWC has not yet done so.

MAWC will offer payment options including cash, check, credit/debit card, and electronic funds transfer (EFT). Customers will have the option to make payments via mail, online, or at select third party locations. Customers can also make payments over the phone by calling 1-855-748-6066.

MAWC has stated that it intends to install meters during the two or three years after its acquisition of the Pom-Osa water facilities. Upon completion of these installations, MAWC intends to switch Pom-Osa customers from flat-rate to metered billing. MAWC will need to clearly communicate with customers about the anticipated changes in billing in advance of those changes taking effect.

In order to incorporate Pom-Osa customers into its billing and customer service systems, it will be necessary for MAWC to properly enter the appropriate customer information into its systems and apply the Commission-approved rates. MAWC will also need to provide training to its call center personnel regarding rates and rules applicable to Pom-Osa customers so that customer service matters are handled accurately and in a timely manner.

Rate and Tariff Matters

In its application, MAWC proposes to apply its existing monthly approved flat rate⁴ for the Pom-Osa service area. The rate would be a monthly flat rate charge of \$48.40, until meters are installed, and the rules governing water service are currently found in MAWC's water tariff P.S.C. MO No.13. Currently, customers are billed \$45.00 per month⁵ by the Pom-Osa HOA. Once meters are installed, MAWC proposes to utilize existing rates currently applicable to "Other Missouri" service areas.

³ WA-2022-0361, "Application, Motion for Waiver and Motion for Expedited Treatment," page 3.

⁴ MAWC Water Tariff P.S.C. MO No. 13, Sheet No. RT 1.2

⁵ Staff DR0006

Technical, Managerial, and Financial Capacity and Tartan Energy Criteria

Staff utilizes the concepts of Technical, Managerial, and Financial capabilities (“TMF”) in studying applications involving existing water and/or sewer systems. Staff has reviewed and stated its position on TMF regarding each of MAWC’s affiliates in previous CCN and transfer of assets cases before the Commission. Staff’s position on MAWC’s ability to meet TMF criteria remains positive regarding those affiliates, and similarly takes the position that MAWC has adequate TMF capabilities in this case. It is Staff’s position that MAWC has the ability to secure funding, to oversee construction of any necessary upgrades or repairs, and the ability to successfully manage operations of the subdivision utility system.

When considering a request for a new CCN, the Commission applies criteria originally developed in a CCN case filed by the Tartan Energy Company and referred to now as the “Tartan criteria.” The Tartan criteria contemplate 1) need for service; 2) the utility’s qualifications; 3) the utility’s financial ability; 4) the economic feasibility of the proposal; and, 5) promotion of the public interest. Similar to the TMF capabilities, in previous CCN cases, Staff investigated these criteria and that investigation relates to this proposed acquisition. The results of Staff’s investigation are outlined below:

(1) Need for Service

There is both a current and future need for water service. The existing customer base in Pom-Osa has both a desire and need for service. In addition, there is a need for the necessary steps to be taken to update the Pom-Osa water system, and to ensure the provision of safe and adequate service. Further, Pom-Osa has made the decision to exit the water utility business, sell the existing system to MAWC, and rely upon MAWC to properly operate and maintain the existing water system in order that customers will continue to have safe and adequate service.

(2) Applicant’s Qualifications

MAWC is an existing water and sewer corporation and public utility subject to the jurisdiction of the Commission. MAWC is currently providing water service to approximately 474,000 customers and sewer service to more than 16,500 customers in several service areas throughout Missouri. MAWC is a subsidiary of American Water Works Company, Inc., and is affiliated with other American Water companies that undertake some of the tasks associated with utility service, such as customer billing, and technical resources. Additionally, MAWC is currently operating the Pom-Osa water system.

(3) Applicant’s Financial Ability

MAWC anticipates no need for external financing to complete this acquisition, and has demonstrated over many years that it has adequate resources to operate utility systems it owns, to acquire new systems, to undertake construction of new systems and expansions of existing systems, to plan and undertake scheduled capital improvements, and timely respond and resolve emergency issues when such situations arise.

(4) Feasibility of the Proposal

MAWC’s purchase of the system, utilizing the previously approved rates noted above, is financially feasible. MAWC can draw upon the significant resources of its parent company, should any shortfall arise prior to the completion of MAWC’s current pending rate case.

(5) Promotion of the Public Interest

As the Commission determined in GA-94-127, positive findings with respect to the other four standards above will in most instances support a finding that an application for a CCN will promote the public interest. Additionally, due to involvement by the HOA of Pom-Osa in voting to approve the sale of the water system, subsequent Purchase Agreement, and for the reasons outlined previously in this memorandum, Staff asserts that MAWC’s request for a CCN and related acquisition of the Pom-Osa water assets promotes the public interest.

Staff’s conclusion is that the points regarding TMF capacities and the Tartan Energy criteria are all met, for this case.

Other Issues

MAWC is a corporation that is in “good standing” status with the Missouri Secretary of State.

MAWC is current with annual report filings with the Commission through calendar year 2021, as documented on the Commission’s Electronic Filing and Information System (EFIS).

MAWC is current on its annual assessment quarterly payments.

MAWC has other pending cases before the Commission, as follows:

WA-2022-0311	CCN (Stewartsville)
WA-2022-0293	CCN (Purcell)
WA-2022-0229	CCN (Monsees)
WA-2021-0376	CCN (Eureka)
WA-2023-0071	CCN (Smithton)
WC-2021-0227	Complaint (Nangle)
WO-2023-0008	Infrastructure Rate Adjustment
WR-2022-0303	General Rate Case
WU-2020-0417	Accounting Authority Order

These above-noted pending cases will have no direct impact upon this proposed case requesting a new CCN for water and establishing rates for water service in this requested area, nor will approval of the CCN and water rate impact the above-noted pending cases before the Commission.

Staff's Recommendations and Conclusions

Based upon the above, Staff recommends that the Commission:

1. Grant MAWC a CCN to provide water service in the Pom-Osa service area;
2. Require MAWC to install meters for each customer within the Pom-Osa service area within three years of closing on the assets;
3. Approve MAWC's recommended monthly rate of \$48.40, which is a \$3.40 per month increase for Pom-Osa customers, until meters are installed for each customer, or the cost of service is examined in a future rate case;
4. Require MAWC to submit tariff sheets, to become effective before closing on the assets, to include a service area map, and service area written description to be included in its EFIS water tariff P.S.C. MO No. 13, and water rates, applicable specifically to water service in its Pom-Osa service area;
5. Require Pom-Osa or MAWC to notify the Commission of closing on the assets within five (5) days after such closing;
6. If closing on the water system assets does not take place within thirty (30) days following the effective date of the Commission's order approving such, require MAWC to submit a status report within five (5) days after this thirty (30) day period regarding the status of closing, and additional status reports within five (5) days after each additional thirty (30) day period, until closing takes place, or until MAWC determines that the transfer of the assets will not occur;
7. If MAWC determines that a sale of the assets will not occur, require MAWC to notify the Commission of such no later than the date of the next status report, as addressed above, after such determination is made, and require MAWC to submit tariff sheets, as appropriate, in its water tariff that would cancel service area maps and descriptions and rate sheets applicable to customers in the Pom-Osa area;
8. Require MAWC to keep its financial books and records for plant-in-service and operating expenses in accordance with the NARUC Uniform System of Accounts; Staff recommends the Commission specifically require such recordkeeping apply to the Pom-Osa water system.
9. Adopt, for Pom-Osa Water assets, the depreciation rates ordered for MAWC in Case No. WR-2020-0344;
10. Require MAWC to obtain from Pom-Osa, as best as possible prior to or at closing, all records and documents, including but not limited to all plant-in-service original cost documentation, along with depreciation reserve balances, documentation of contribution-in-aid-of construction transactions, and any capital recovery transactions;
11. Require MAWC to provide training to its call center personnel regarding rates and rules applicable to the Pom-Osa water system customers;

12. Require MAWC to include the Pom-Osa water system customers in its established monthly reporting to the CXD Staff on customer service and billing issues, on an ongoing basis, after closing on the assets;
13. Require MAWC to distribute to the Pom-Osa water system customers an informational brochure detailing the rights and responsibilities of the utility and its customers regarding its water service, consistent with the requirements of Commission Rule 20 CSR 4240-13, within thirty (30) days of closing on the assets;
14. Require MAWC to provide to the CXD Staff an example of its actual communication with the Pom-Osa water system customers regarding its acquisition and operations of the water system assets, and how customers may reach MAWC, within ten (10) days after closing on the assets;
15. Require MAWC to provide to the CXD Staff a sample of ten (10) billing statements from the first month's billing within thirty (30) days after closing on the assets; and,
16. Require MAWC to file notice in this case outlining completion of the above-recommended training, customer communications, and notifications within ten (10) days after such communications and notifications.
17. Require MAWC to file notice in this case when it is ready to change its Pom-Osa customers from flat-rate to metered service (30) days before it intends to do so;
18. Require MAWC to provide to the CXD Staff a copy of the communication that it will send to Pom-Osa customers about changing rates within (10) days of filing notice in this case of its intent to do so;
19. Require MAWC to file notice in this case once Staff Recommendations Nos. 1-18 above have been completed.

ATTACHMENTS:

- A. Depreciation Schedule

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Missouri-American Water)
Company's Application for a Certificate of) File No. WA-2022-0361
Convenience and Necessity Authorizing it to)
Install, Own, Acquire, Construct, Operate,)
Control, Manage and Maintain a Water System)
in and around an area of Benton County,)
Missouri (Pom-Osa Heights Subdivision))

AFFIDAVIT OF SHERRYE LESMES

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW SHERRYE LESMES and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Recommendation* in memorandum form; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

Sherrye Lesmes
SHERRYE LESMES

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 26th day of September 2022.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2025
Commission Number: 12412070

D. Suzie Mankin
Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Missouri-American Water)
Company's Application for a Certificate of) File No. WA-2022-0361
Convenience and Necessity Authorizing it to)
Install, Own, Acquire, Construct, Operate,)
Control, Manage and Maintain a Water System)
in and around an area of Benton County,)
Missouri (Pom-Osa Heights Subdivision))

AFFIDAVIT OF KERI ROTH

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW KERI ROTH and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Staff Recommendation* in memorandum form; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.



KERI ROTH

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 20th day of September 2022.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2025
Commission Number: 12412070



Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Missouri-American Water)
Company's Application for a Certificate of)
Convenience and Necessity Authorizing it to)
Install, Own, Acquire, Construct, Operate,)
Control, Manage and Maintain a Water System)
in and around an area of Benton County,)
Missouri (Pom-Osa Heights Subdivision))

File No. WA-2022-0361

AFFIDAVIT OF CHARLES THOMASON

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW CHARLES THOMASON and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Staff Recommendation* in memorandum form; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

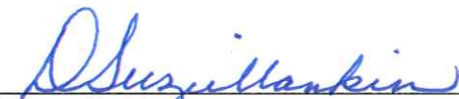


CHARLES THOMASON

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 22nd day of September 2022.

D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: April 04, 2025 Commission Number: 12412070



Notary Public

MISSOURI AMERICAN WATER COMPANY – Water
Schedule of Depreciation Rates
WR-2020-0344

USOA Account Number	Account Description	Remaining Life Depreciation Rate %	Average Service Life (Years)	Iowa Curves	% Net Salvage
<u>Source of Supply</u>					
311.0	Structures & Improvements	1.97%	60	R4	-25%
312.0	Collecting & Impoundment Reservoirs	0.35%	85	R3	0%
313.0	Lake, River & Other Intakes	3.57%	70	S0.5	-10%
314.0	Wells & Springs	2.52%	55	R1.5	-5%
315.0	Infiltration Galleries and Tunnels	1.77%	60	R2.5	0%
316.0	Supply Mains	1.45%	80	R3	-25%
317.0	Miscellaneous Source of Supply – Other	4.97%	25	SQ	0%
<u>Pumping Plant</u>					
321.0	Structures & Improvements	3.95%	75	R2.5	-15%
322.0	Boiler Plant Equipment	3.05%	37	R3	-5%
323.0	Power Generation Equipment	3.05%	37	R3	-5%
324.0	Steam Pumping Equipment	1.89%	47	R1	-10%
325.0	Electric Pumping Equipment	1.89%	47	R1	-10%
326.0	Diesel Pumping Equipment	1.89%	47	R1	-10%
327.0	Hydraulic Pumping Equipment	1.89%	47	R1	-10%
328.0	Other Pumping Equipment	1.89%	47	R1	-10%
<u>Water Treatment Plant</u>					
331.0	Structures & Improvements	2.34%	80	R2.5	-15%
332.0	Water Treatment Equipment	2.18%	48	R1.5	-20%
333.0	Miscellaneous Water Treat, Other	3.33%	30	SQ	0%
<u>Transmission and Distribution</u>					
341.0	Structures & Improvements	1.49%	55	R2.5	-20%
341.1	Structures & Improve - Special Crossing	1.49%	55	R2.5	-20%
342.0	Distribution Reservoirs & Standpipes	1.70%	65	R2.5	-25%
343.0,1,2,3	Transmission & Distribution Mains	1.39%	90	R2.0	-30%
344.0	Fire Mains	1.56%	85	S1	-30%
345.0	Customer Services	2.92%	65	R2.0	-100%
346.0	Customer Meters	2.40%	42	R1.5	-10%
347.0	Customer Meter Pits & Installation	2.40%	42	R1.5	-10%
348.0	Fire Hydrants	1.85%	65	R1.5	-30%
349.0	Misc Trans & Dist – Other	2.96%	50	R3	0%
<u>General Plant</u>					
390.0	Structures & Improve - Shop & Garage	3.02%	55	R2.5	-20%
390.1	Structures & Improve - Office Buildings	2.09%	47	S0	-20%
390.3	Structures & Improve – Miscellaneous	3.72%	55	R2.0	-20%
390.9	Structures & Improve – Leasehold	2.75%	25	R4	0%
391.0	Office Furniture	3.49%	20	SQ	0%
391.1	Computer & Peripheral Equipment	19.06%	5	SQ	0%
391.2	Computer Hardware & Software	19.06%	5	SQ	0%
391.25	Computer Software	5.00%	20	SQ	0%
391.26	Personal Computer Software	10.00%	10	SQ	0%
391.3	Other Office Equipment	10.46%	15	SQ	0%
391.4	BTS Initial Investment	5.00%	20		0%
392.1	Transportation Equipment - Light trucks	5.57%	9	L1.5	15%
392.2	Transportation Equipment - Heavy trucks	0.00%	10	L1.5	15%
392.3	Transportation Equipment – Autos	0.00%	6	L1.5	15%
392.4	Transportation Equipment – Other	6.15%	15	S3	5%
393.0	Stores Equipment	3.88%	25	SQ	0%
394.0	Tools, Shop, Garage Equipment	3.73%	20	SQ	0%
395.0	Laboratory Equipment	3.90%	15	SQ	0%
396.0	Power Operated Equipment	3.79%	12	L1	20%
397.1	Communication Equip - Non Telephone	5.76%	15	SQ	0%
397.2	Communication Equip – Telephone	8.94%	10	SQ	0%
398.0	Miscellaneous Equip	6.48%	15	SQ	0%
399.0	Other Tangible Equipment	2.43%	20	SQ	0%

MISSOURI AMERICAN WATER COMPANY – Sewer
Schedule of Depreciation Rates
WR-2020-0344

USOA Account Number	Account Description	Remaining Life Depreciation Rate %	Average Service Life (Years)	Iowa Curves	% Net Salvage
<u>Collection Plant</u>					
351	Structures & Improvements	2.03%	50	R3	-5%
352.1	Collection Sewers (Force)	1.64%	60	R2.5	-10%
352.2	Collection Sewers (Gravity)	1.58%	70	R3	-20%
353	Services To Customers	2.87%	55	R2.0	-40%
354	Flow Measuring Devices	3.38%	25	S2.5	0%
356	Other Collection Equipment	3.15%	50		0%
357	Communication Equipment	6.67%	15	SQ	0%
<u>Pumping Plant</u>					
361	Structures & Improvements	2.17%	45	R3	0%
362	Receiving Wells	2.87%	30	L2.5	0%
363	Electric Pumping Equip, (Includes Generators)	4.31%	15	L1.5	-5%
364	Diesel Pumping Equipment	4.31%	15	L1.5	-5%
365	Other Pumping Equipment	4.31%	15	L1.5	-5%
<u>Treatment and Disposal Plant</u>					
371	Structures & Improvements	1.43%	60	R2.5	-5%
372	Treatment & Disposal Equipment (Includes pumps, blowers, generators)	3.97%	30	S0.5	-20%
373	Plant Sewers	1.60%	50	R2.5	0%
374	Outfall Sewer Lines	3.04%	35	L2.0	0%
<u>General Plant</u>					
390.0	Structures & Improve – General	3.11%	35	R2.5	-5%
390.9	Structures & Improve – Leasehold	5.00%	20	R4	0%
391.0	Office Furniture	5.00%	20	SQ	0%
391.1	Computer & Peripheral Equipment	20.00%	5	SQ	0%
391.2	Computer Hardware & Software	20.00%	5	SQ	0%
391.25	Computer Software	5.00%	20	SQ	0%
391.26	Personal Computer Software	10.00%	10	SQ	0%
391.3	Other Office Equipment	6.67%	15		0%
391.4	BTS Initial Investment	5.00%	20		0%
392.0	WW Transportation Equipment	3.45%	10	L2.5	5%
392.1	Transportation Equipment - Light trucks	3.45%	10	L2.5	5%
392.2	Transportation Equipment - Heavy trucks	3.45%	10	L2.5	5%
392.3	Transportation Equipment – Autos	3.45%	10	L2.5	5%
392.4	Transportation Equipment – Other	3.45%	10	L2.5	5%
393.0	Stores Equipment	4.00%	25	SQ	0%
394.0	Tools, Shop, Garage Equipment	5.00%	20	SQ	0%
395.0	Laboratory Equipment	6.67%	15	SQ	0%
396.0	Power Operated Equipment	7.71%	15	L2.5	0%
397.1	Communication Equip - Non Telephone	6.67%	15	SQ	0%
397.2	Communication Equip – Telephone	6.67%	15	SQ	0%
398.0	Miscellaneous Equip	6.43%	15	SQ	0%
399.0	Other Tangible Equipment	0.00%	30	R2.0	0%