Exhibit No.	
Issue:	Quality of Service
Witness:	Gordon Fowlston
Type of Exhibit:	Direct Testimony
Sponsoring Party:	City of Riverside
Case Number:	WR-2010-0131
Date Prepared:	March 9, 2010

Missouri-American Water Company

WR-2010-0131

Direct Testimony of

Gordon Fowlston

Before the
Missouri Public Service Commission

On behalf of

City of Riverside

March 9, 2010

Missouri-American Water Company

WR-2010-0131

Direct Testimony of Gordon Fowlston

Q PLEASE STATE YOUR NAME.

A My name is Gordon Fowlston.

Q ON WHOSE BEHALF ARE YOU APPEARING FOR THE PURPOSES OF THIS DIRECT TESTIMONY?

A I am appearing for the purposes of this testimony on behalf of intervenor City of Riverside (the "City"). The City receives service directly and its residents also receive service from Missouri-American Water Company ("MAWC").

Q PLEASE DESCRIBE YOUR EMPLOYMENT.

A I am Fire Chief for the City's Fire Department (the "Fire Department").

Q WHAT IS YOUR INTEREST IN THIS PARTICULAR CASE?

A I am testifying as a representative of the City, which is attempting to protect its citizens in the present case. The City is within the Parkville District, subject to the Platte County water tariff at issue in this case.

Q WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A The purpose of my testimony is to describe certain water service issues affecting the City. The City also requests that these issues be considered in determining its water rate.

Q WHAT ISSUES REGARDING WATER SERVICE HAVE YOU OBSERVED IN THE CITY?

A The Fire Department's major concerns with the City's water distribution system are: (1) low water pressure and low gallons per minute produced by the City's fire hydrants; (2) the

charging of a monthly "hydrant fee" and a monthly "standby fee" for certain fire hydrants and sprinkler systems by MAWC, rather than including the cost of placement and maintenance of such fire hydrants in MAWC's cost basis in determining a fair and reasonable rate to be charged for water, as we understand is required by Missouri law; (3) MAWC's inadequate performance of annual maintenance of fire hydrants and water flow tests; (4) MAWC's possible requirement of a second service line for residential fire suppression when not required by fire code; (5) fire hydrants are not color coded for flows per National Fire Protection Association standards (multiple colors are used for fire hydrants and some have not been painted and are rusting); (6) fire hydrants are not painted with reflective paint per National Fire Protection Association standards; and (7) the inadequate service provided by MAWC when fire hydrants are out-of-service (MAWC has been slow to respond or has not covered the hydrants per National Fire Protection Association standards to show they are out-of-service, and the Fire Department has had to cover the fire hydrants several days after reporting them out-of-service).

In particular, during my time with the City (August 2007 to present) we have had four major structure fires. When the Fire Department attempted to extinguish these fires, we experienced a combination of problems including insufficient fire flow, a lack of fire hydrants, broken fire hydrants (on two occasions), and extremely long supply hose deployments. As a result of these problems, two of the structures were total losses. These structures were located in separate areas of the City, indicating that the problems associated with the City's water distribution system are not isolated to a particular area.

Q WHEN AND WHERE DID THESE FIRES OCCUR?

A The fires occurred on the following dates and at the following addresses: (1) September 5, 2007 at 4800 Northwood Road ("Fire 1"); (2) November 24, 2007 at 4419 D'Mons Drive ("Fire 2"); (3) July 4, 2009 at 1001 Intercon Drive ("Fire 3"); and (4) February 19, 2010 at 1902 NW 45th Terrace ("Fire 4").

Q WHAT ARE THE LOCATIONS OF THE FIRE HYDRANTS USED TO FIGHT THESE FIRES?

A The fire hydrants used to fight Fire 1 were located at the front drive of Park Hill South High School (4800 Riverpark), approximately one mile from the fire. As a result of the distance of the fire hydrants, the Fire Department was forced to shuttle water to fight the fire.

The fire hydrants used to fight Fire 2 were located at 4406 D'Mons Drive, 4800 Cliffview Drive, and at the intersection of D'Mons Drive and Cliffview Drive. The fire hydrants located at 4406 D'Mons Drive and 4800 Cliffview Drive had low water pressure (approximately 35-40 psi), and the fire hydrant at the intersection D'Mons Drive and Cliffview Drive was broken and unable to be used.

The fire hydrants used to fight Fire 3 were private fire hydrants located at the front of building, requiring a deployment of approximately 1,500 feet of fire hose, and at an adjacent property (Complete Home Concepts), requiring a 300 foot deployment by hand of hose (the Fire Department had to cut a hole through the fence to access this fire hydrant). The inadequate fire hydrants caused a significant delay in procuring water to fight this fire.

The fire hydrants used to fight Fire 4 were located at 4504 NW Pawnee Drive and 4410 NW Pawnee Drive. The fire hydrant located at 4504 NW Pawnee Drive had low water pressure (approximately 38 psi) and ultimately broke, although the Fire Department was nonetheless able to pump water from the broken hydrant. The fire hydrant located at 4410 NW Pawnee

Drive also had low water pressure (approximately 40 psi) and was approximately 900 feet away from the fire.

Q HOW LONG HAD THESE FIRES BEEN BURNING BEFORE THE FIRE DEPARTMENT RECEIVED NOTIFICATION AND BEGAN FIGHTING THEM?

A Although it is virtually impossible to determine the actual time of ignition, what can be determined is the approximate time from discovery of the fire to the first application of the water stream.

Fire 1 had been burning approximately 30-40 minutes before the first application of water based on the time of the call to dispatch; however, this call was unique in that it was a criminal action and the scene had to be secured by police before entry.

Fire 2 had been burning approximately 20-25 minutes before first application of water based on the time of the call to dispatch.

Fire 3 had been burning approximately 12 minutes before first application of water based on the time of the call to dispatch.

Fire 4 had been burning approximately 8 minutes before first application of water based on the time of the call to dispatch.

Q HOW DID THE FIRE DEPARTMENT RECEIVE NOTIFICATION OF THESE FIRES?

A The Fire Department received notification of Fire 1 via radio by a City police officer working undercover for metro meth. The Fire Department received notification of Fire 2, Fire 3, and Fire 4 by phone from the City's 911 dispatch.

Q WHAT WERE THE IGNITION AND FUEL SOURCES OF THESE FIRES?

The ignition source of Fire 1 was not determined, although this structure was a suspected drug lab. The fuel source likely was a combination of common household materials, construction materials, and other undetermined materials.

The ignition source of Fire 2 was careless use of smoking materials. The fuel source was bedding and oxygen (tanks for home health use).

The ignition source of Fire 3 was electrical arching from a welder. The fuel source was flammable liquid.

The ignition source of Fire 4 was undetermined, and the fuel source was common household and building materials.

Q DOES THE FIRE DEPARTMENT HAVE PUMPS ON THE FIRE TRUCKS USED TO FIGHT THESE FIRES?

A Yes, the Fire Department's fire trucks are equipped with pumps capable of producing 1,500 gallons of water per minute.

Q DOES THE FIRE DEPARTMENT HAVE STORAGE TANKS ON THE FIRE TRUCKS USED TO FIGHT THESE FIRES?

A Yes, the Fire Department has storage tanks on one of the fire trucks that hold up to 1,000 gallons (the first truck to respond to these fires), and another fire truck has storage tanks that hold up to 300 gallons.

Q AT THE TIME OF THESE FIRES, WHAT WERE THE FLOW RATES FROM THE HYDRANTS USED TO FIGHT THESE FIRES?

A The fire hydrants used to fight Fire 2 were only able to flow a total of 900 gallons per minute based on the number of lines. This area requires over 1,500 gallons per minute due to the commercial nature of the property.

The fire hydrants used to fight Fire 4 were only able to flow 2 lines of only 125 gallons per minute (totaling 250 gallons per minute). The Fire Department had to locate another fire hydrant, which was only able to provide another 250 gallons per minute.

Q IN THE PROCESS OF FIGHTING THESE FIRES, DID THE FIRE DEPARTMENT ATTEMPT TO AUGMENT ITS WATER SUPPLY BY DRAWING WATER FROM OTHER HYDRANTS THAN THOSE IN CLOSEST PROXIMITY TO THE FIRES?

A Yes, although the City's water distribution system is not looped in all areas (some of these areas are where the fires were located) and has dead ends at the locations of Fire 2 and Fire 4. Therefore, using additional fire hydrants at these locations would only take water from the same main.

Q WHAT IS THE DISTANCE FROM THE FIRE HYDRANTS USED TO FIGHT THESE FIRES TO THE NEXT CLOSEST FIRE HYDRANTS?

A The next closest fire hydrants to the location of Fire 1 are approximately 2,000 feet from the location of the fire.

The next closest fire hydrant to the location of Fire 2, which is approximately 500 feet from the location of the fire, was broken at the time of the fire. The next closest fire hydrant that was functioning at the time of the fire is an additional 300 feet from the location of the fire (total of 800 feet).

The next closest fire hydrants to the location of Fire 3 are approximately 1,500 feet from the location of the fire.

The next closest fire hydrants to the location of Fire 4 are approximately 900 feet from the location of the fire.

Q ARE THE FIRE FLOWS OF THE CITY'S WATER DISTRIBUTION SYSTEM SUFFICIENT FOR FIRE PROTECTION?

A No, the City and the City of Houston Lake (the City also provides fire protection for the City of Houston Lake) have multiple areas that do not meet the minimum required residential fire flow requirements of 1,000 gallons per minute and the minimum commercial fire flow requirements of 1,500 gallons per minute. These fire flow requirements are contained in Ordinance 2005-05, 2003 International Fire Code, which became effective January 18, 2005. Prior to January 18, 2005, the City had adopted the 1994 Uniform Fire Code, which contains similar requirements regarding fire flows. The areas of the City with insufficient fire flows are described in the Riverside Fire Flow Modeling Report prepared by MAWC, a copy of which is attached hereto as **Exhibit A**.

Q DID THE MAINS INSTALLED BY MAWC SINCE THE EFFECTIVE DATE OF THE CURRENT FIRE FLOW REQUIREMENTS MEET THESE REQUIREMENTS AT THE TIME THEY WERE PLACED IN SERVICE?

A I am unaware of any such requirements in the fire code with respect to mains, although the fire code dictates the number of gallons per minute that must be produced at a fire hydrant. The number of gallons per minute produced at a fire hydrant is controlled by the size of the main, pumping capacity, whether the distribution system is looped or dead-ended and the distance from the hydrant to the water supply. To my knowledge, the only mains that have been installed by MAWC are along West Platte Road and also along Vivion Road. These mains were supposed to consist of 16 inch pipe, which should have increased flows to the few hydrants at those locations. The other main was installed by the City from High Drive along Gower Road and Interstate I-635 to 50th Street. Since this main is now looped, we

assume that flow rates have increased, although I am unaware of any documents produced by MAWC showing that such flow rates have increased to provide sufficient fire flows to the City's fire hydrants.

Q BASED ON THE FOREGOING, WHAT RELIEF ARE YOU REQUESTING IN RELATION TO THESE ISSUES?

A The City requests that the inadequacy of MAWC service be a consideration when the amount of rate relief is determined.

Q SHOULD THE REDUCTION IN RESPONSE TO YOUR PROBLEM BE PASSED ON TO OTHER DISTRICTS?

A No, the reduction originates from the Parkville District and should not be attributed to other districts.

Q DOES THAT CONCLUDE YOUR TESTIMONY?

A Yes.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the matter of Missouri-American Water Company's Request for Authority to Implement a General Rate Increase for Water and Sewer Service Provided in Missouri Service Areas	)))))	Case No. WR-2010-0131

Affidavit of Gordon Fowlston

State of Missouri)
) ss.
County of Clay)

Gordon Fowlston, being first duly sworn, on his oath states:

1. My name is Gordon Fowlston. I am Fire Chief for the Fire Department of the City of Riverside, Missouri.

2. The above Direct Testimony in question and answer form was prepared by me, or at my direction.

3. I hereby swear and affirm that the aforesaid written direct testimony is true and accurate to the best of my present knowledge, information and belief.

Gordon Fowlston

Subscribed and sworn to before me on this 9 day of March, 2010.

Notary Public

My commission expires:
March 25, 2012

HOLLY PHILLIPS
Notary Public - Notary Seal
STATE OF MISSOURI
Clay County
Commission Number 08378698
My commission expires March 25, 2012