

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC INVESTIGATION INTO EXCESSIVE)	CASE NO.
WATER LOSS BY KENTUCKY'S JURISDICTIONAL)	2019-00041
WATER UTILITIES)	

DIRECT TESTIMONY

OF

**PAUL NESBITT
NESBITT ENGINEERING, INC.**

ON BEHALF OF

MORGAN COUNTY WATER DISTRICT

FILED: MAY 31, 2019

**DIRECT TESTIMONY
OF
PAUL NESBITT**

Q. Please state your name, business address, and position.

A. My name Paul Nesbitt. I am an engineer and President of Nesbitt Engineering, Inc., 27 North Upper Street, Lexington, Kentucky 40507.

Q. What is your relationship with Morgan County Water?

A. Nesbitt Engineering was hired by Morgan County Water District on April 15th, 2019.

Q. Why did Morgan County Water hire you?

A. Nesbitt Engineering was hired to consult, advise, and assist Morgan County Water District with their water loss problem, and to propose and help implement solutions.

Q. What have you done thus far?

A. I studied the District's water loss reports. Exhibit 1 is a line graph showing the District's water loss from 2015 to present. However, I also analyzed the District's audits to determine water revenue compared to water pumped or purchased from 2014 to present. See Exhibit 2. I believe that comparing water pumped to water sold provides a very accurate analysis of the water loss problem. Exhibit 1 and 2 are comparable. However, as you can see from Exhibit 2

the percentage of pumped that was actually sold shows that the water loss problem goes back at least to 2014. In December of 2014 the District only collected revenue for approximately 42% of the water it pumped. Since then the water loss has continually worsened.

Q. Based upon this information what is your plan?

A. I presented a plan titled Water Loss Program Goals to the District on May 13th, 2019, which was adopted by the District. See Exhibit 3. I have followed up with discussions with Rural Development and Appalachian Regional Commission.

The District has authorized Nesbitt Engineering to prepare applications for a \$400,000 loan from Rural Development, and an \$800,000 grant from Appalachian Regional Commission. We are in the process of preparing those applications now. Those funds will be used for capital projects.

There will be limited replacement of waterlines in the worst areas of the water distribution system. This will also include the replacement of a pump station with pumping systems that will be more energy efficient.

There will be installation of flow monitoring stations to track the flow of water in system. These, as well as the pumping station, will be connected to the District's SCADA system.

A plan will be developed that will guide the long term solution to the lost water issue. This plan will look at the age and type of installed pipes, examine water pressures, and plan out a systemic approach to solving the issues. As a result, the District will have multiple projects planned allowing the project profiles and funding applications to be prepared. The execution of this plan will enable the District to operate and maintain the water system with the least possible water loss.

Q. Do you have an anticipated timeline on these applications?


A. We are working diligently to complete these applications and get approval. It is our hope to close before the end of 2019.

Q. Do you anticipate a request for a rate increase?

A. Yes. I and the District expect to apply for a rate increase to service this new debt, and to increase revenue to a level that will adequately fund the District's operations and continued rehabilitation of its system. The District has indicated that it will seek the rate increase in conjunction with the PSC approval of the Rural Development loan.

Verification


I, Paul Nesbitt, hereby state and affirm that the foregoing testimony and attached exhibits were prepared by me or under my supervision, and all statements contained therein are true and correct to the best of my knowledge and belief, on this the 31ST day of May, 2019.



Paul Nesbitt

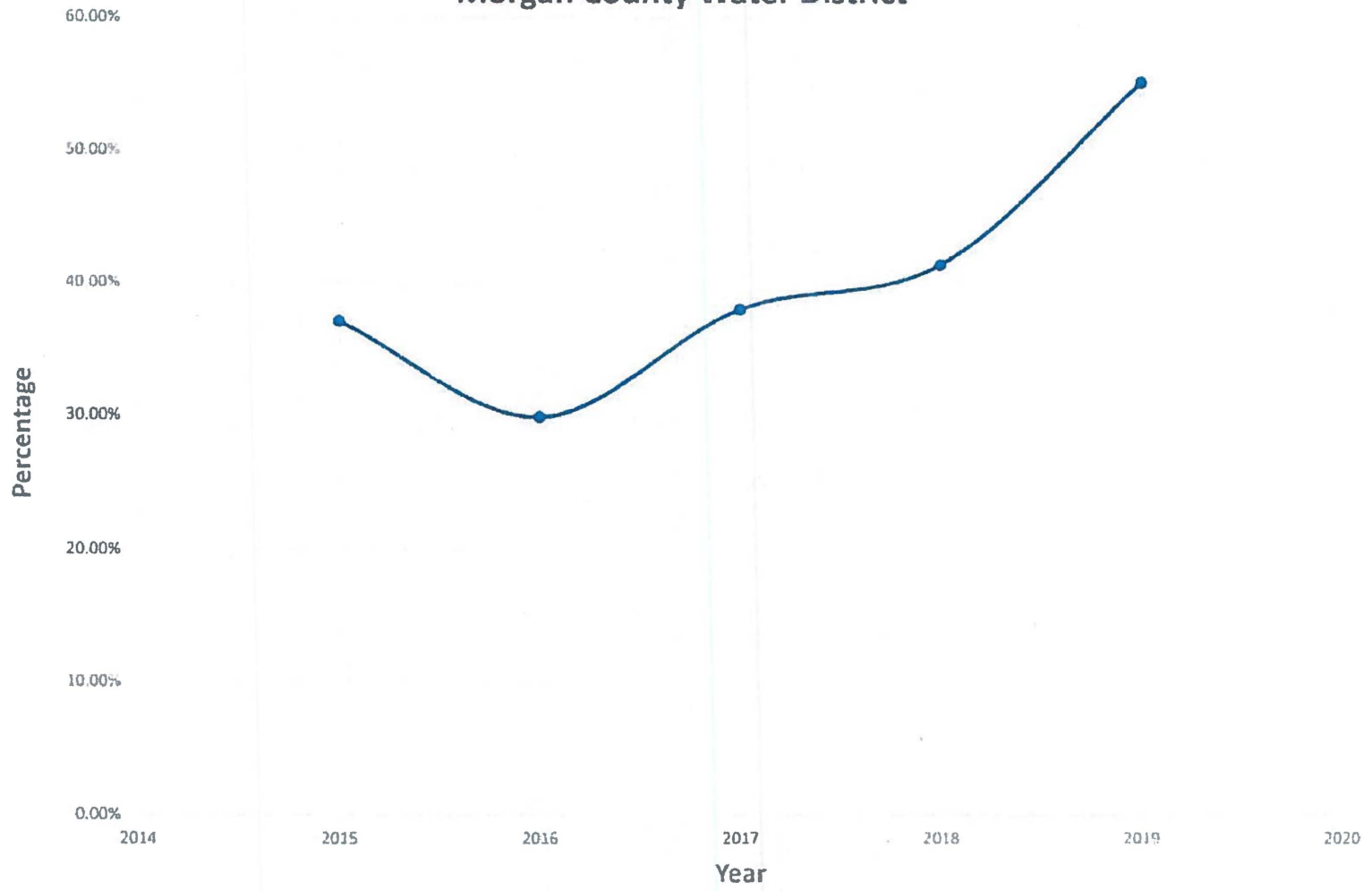
COMMONWEALTH OF KENTUCKY)
COUNTY OF ROWAN)

The foregoing verification statement was SUBSCRIBED AND SWORN to before me by Paul Nesbitt, on this the 31ST day of May, 2019.

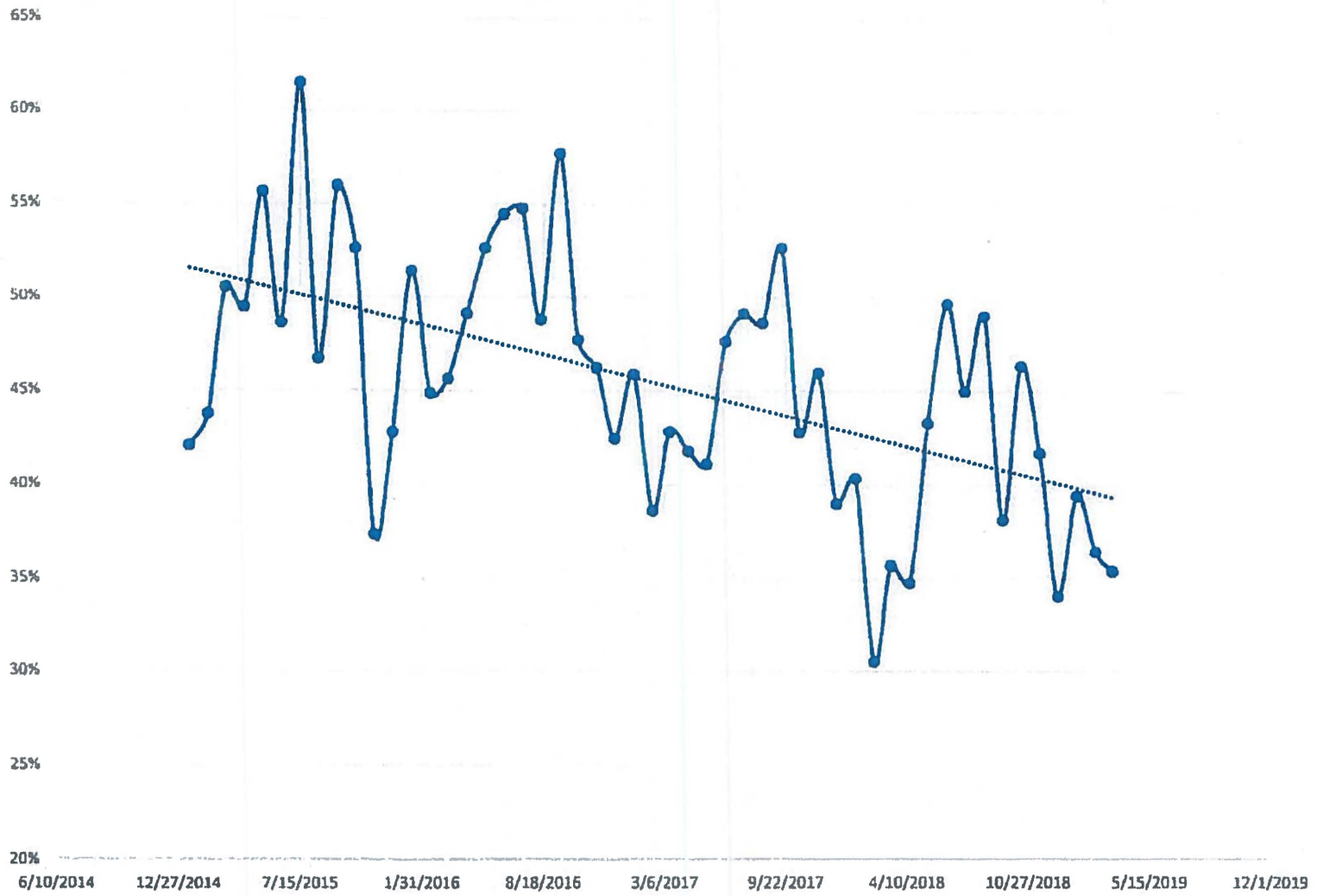


Notary Public, Ky., State at Large
My commission expires: 12/29/20

Percentage of Lost Water Morgan County Water District



Revenue Water Percentage



Water Loss Program Goals

Morgan County Water District

May 13, 2019

The project approach to reducing the water loss for Morgan County Water District (MCWD) involves three distinct phases. There are broken down as follows:

1. **Short Term Goals (0-6 months)**- With the assistance of Kentucky Rural Water, an aggressive program to locate and fix leaks will be implemented. In addition, the procedures in filling out the water loss report for filing with the Kentucky Public Service Commission will be reviewed to ensure that the data reported as in alignment with the PSC guidelines. The results of the effort will give a consistent reporting number that can accurately track the results of the Program as it continues forward. The goals of this effort are:
 - a. *Reduction of lost water by 5%*
 - b. *Reduction of purchased water of 5 %, leading to a savings of over \$35,000 per year.*

2. **Medium Range Goals (0-18 months)**- A project has been developed for a 1-million-dollar project. The project profile is in the system and engineering procurement has been completed. Funding efforts of this is underway. When this is completed, master meters will be installed to assist in the location of leaks, as well as portions of the distribution system being replaced. The goals of the program are:
 - a. *An understanding of which sections of the distribution system are most in need of replacement*
 - b. *Placement of system meters allowing a quicker identification of leaks*
 - c. *Additional reduction of water loss of 5%,*
 - d. *Additional reduction of purchased water of 5 %, leading to a savings of over \$35,000 per year*

3. **Long Range Goals (0-60 months)**- With the information that has been gathered in the Short Term and Medium range programs, additional capital improvement projects will be developed.