



# MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

*Rely on us.*

TO: Commissioners Simpson, Brown, Helgeson, Manning and Mital  
FROM: EWEB Water Operations and Engineering  
DATE: 10/02/13  
SUBJECT: Buried Water Infrastructure  
OBJECTIVE: To Share AWWA Publication with Focus on Buried Water Infrastructure

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## Issue

To inform EWEB leadership with an emerging challenge, within the water industry, as it relates to existing infrastructure.

## Background

The poor condition of the America's infrastructure is a common theme in numerous public works publications and industry discussions. These are often focused on transportation facilities; however, recently the American Water Works Association (AWWA) prepared a publication, *Buried No Longer: Confronting America's Water Infrastructure Challenge* focused on buried water infrastructure. Staff wanted to share this publication with EWEB leadership and provide some thoughts on how information presented relates to EWEB facilities.

## Discussion

As you read the attached publication, please note the following:

- The EWEB water system would be considered a "Large System" serving an estimated population of 178,100 people, with approximately 800 miles of water pipeline.
- EWEB's buried water infrastructure has an average age of 39 years, which is relatively young as compared to other utilities in the Northwest.
- The annual leak repair rate at EWEB is approximately 9 leaks per 100 miles of pipeline, where the average in North America is 25.
- The number of years from installation to replacement of a pipeline is called a service life. Engineering staff estimates the average service life of a pipeline in the EWEB water system to be 100 to 130 years.
- In comparison, the AWWA publication suggests an average service life of a pipeline in the EWEB water system to be 70 to 115 years.
- Engineering staff can use the service life to estimate annual replacement mileage of buried water infrastructure, along with estimating the associated capital expenditures.

Engineering staff intends to continually update EWEB leadership with the ongoing development of service life planning, estimated capital expenditures and the importance for maintaining our buried water infrastructure. There are no recommendations at this time; only presenting information.