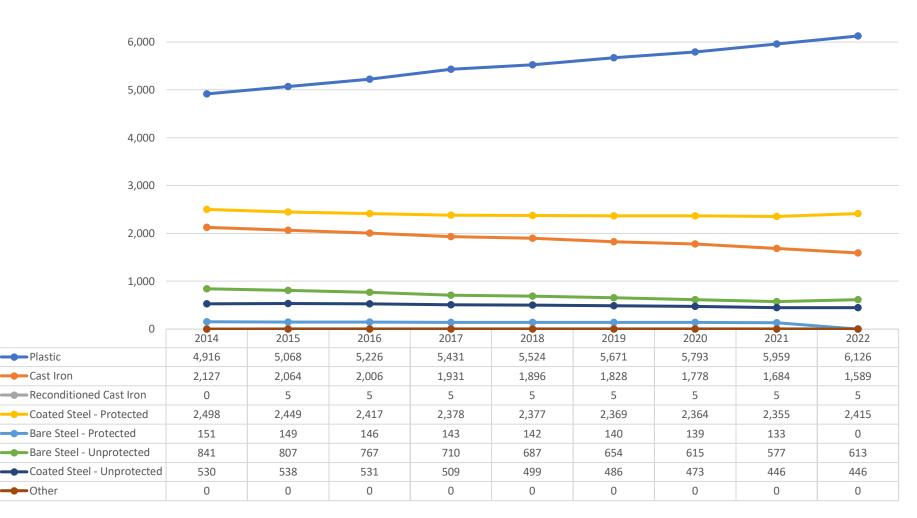
GSEP Working Group Presentation

September 19, 2023

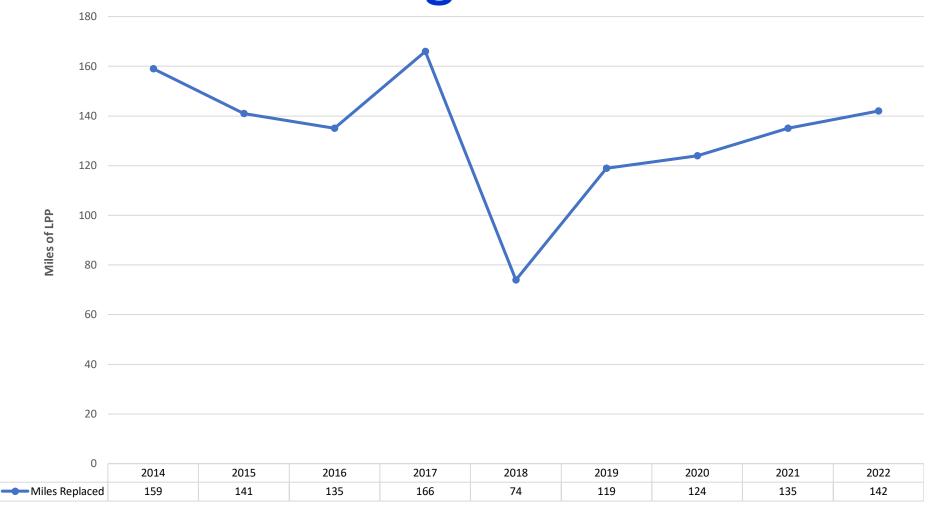
MA Main Inventory by Material



Note: In 2022, the Company reclassified, 133 miles of pre-1971 Bare Steel, Protected pipe as follows:

Protected Coated (56 miles) + Unprotected Bare Steel (77 miles) = 133 miles. The cathodic protection on the 77 miles of pipe reclassified from Protected Bare Steel to Unprotected Bare Steel inventory, could no longer be maintained.

MA Leak Prone Pipe Main Replacement Through GSEP



MA Leak Receipt Rate

Leak Heating Degree Days

1.00 4,500 0.90 4,000 0.80 3,500 0.70 3,000 0.60 2,500 HDD 0.50 2,000 0.40 1,500 0.30 1,000 0.20 500 0.10 0 0.00 2014 2015 2016 2017 2018 2019 2020 2021 2022 0.39 ----- Leak Rate 0.50 0.37 0.41 0.40 0.41 0.37 0.33 0.31 3,233 HDD 3,656 4,124 3,607 3,824 3,593 3,203 3,626 2,873

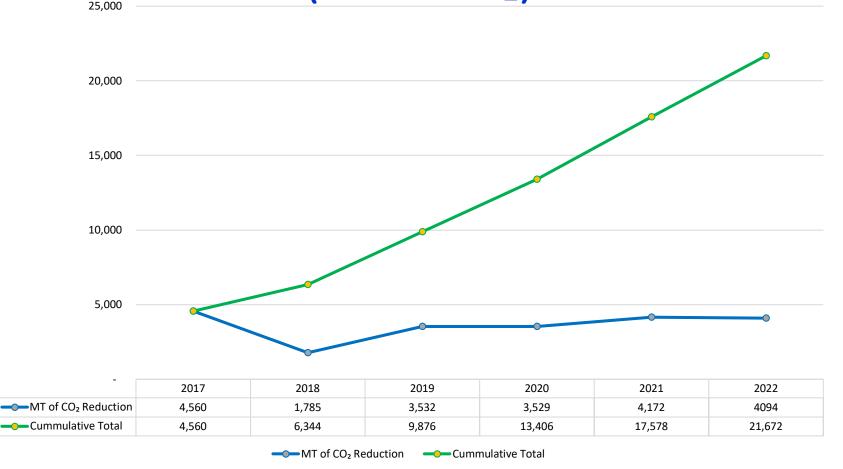
Caleandar Year

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 $Leak \ Receipt \ Rate = \frac{Leak \ Receipts \ (Excluding \ Damages)}{Total \ Miles \ of \ Pipe \ (Miles \ of \ Main \ + \ Miles \ of \ Services)}$

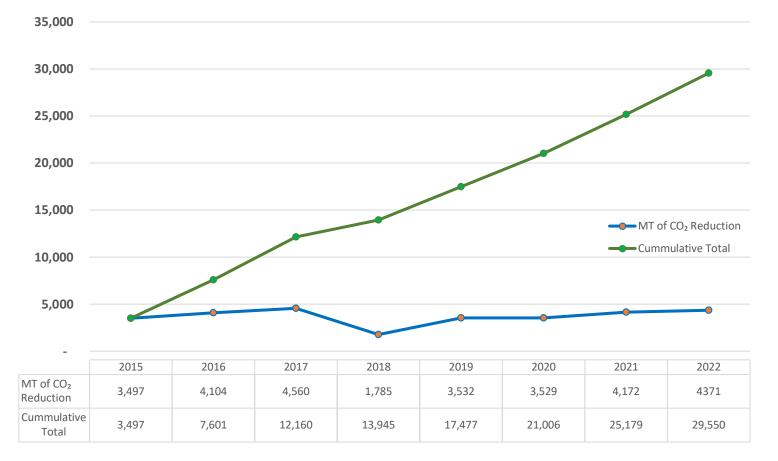
Leak Rate

MA Emission Reductions Through GSEP Program (MT of CO₂)



Note: The emissions reductions listed in the table above assume that the indicated lengths of pipe materials are being replaced with an equal length of plastic distribution piping. Therefore, the emissions reduction is the difference between the emissions of the existing piping material and the projected emissions from an equivalent length of plastic pipe. The emission factors from 310 CMR 7.73 (5) Table 9, were used to calculate the emissions reductions. Pre-1985 plastic pipe replacements are not shown on the table as the regulation does not distinguish between pre-1985 plastic and all the other plastic pipe for emission factor purposes.

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