

Bruce Westby

From: Davis, Brian <Brian.Davis@metc.state.mn.us>
Sent: Monday, November 27, 2017 12:01 PM
To: Bruce Westby
Subject: Water Efficiency Potential Project Request
Attachments: MC_Efficiency_PrelimScreeningResults_Final.pdf

The Metropolitan Council has commissioned a project to assess the economic potential of whether an aggressive water conservation program could reduce the community's expansion of water supply to meet future residential needs. Your community has been identified as having the potential to benefit from this analysis. We are now asking if you are willing to include your community in this study.

Essentially, the study seeks to answer these questions:

1. What overall peak reduction would a community need to achieve to avoid (or delay) installation of a new well?
2. What amount of total water savings could be realized, and how many years of delay for a new well (or wells) can be achieved?
3. What is the total cost to reduce peak demand through residential efficiency, and how does this cost compare with the cost of a new well (or wells)?

This analysis focuses on residential water use. The first step in our analysis was an exercise to determine which of the 94 metropolitan communities with groundwater supplies and a large residential sector have the most potential to benefit from this analysis. We considered total population growth through 2040, residential water demand, peak summer to winter ratio, and estimated number of new wells through 2040. Your community ranks within the top 20 of the 94 communities that we reviewed. Attached is a memo that details the analysis used to screen for the communities with the greatest potential for residential water efficiency. You can review this memo to determine how your community was selected for this study.

There is no cost to your community to participate. However, if you do agree to participate, then we will request the following information specific to your community for the next part of our analysis:

- Well yield data for each well
- Annual operational costs for treatment and for well operation
- Description, program costs, and number of staff for current water conservation programs
- Unit cost per 1,000 gallons of raw water (before treatment, if any)

Please let me know by Friday, December 8th if you are willing to participate.



Brian M. Davis, Ph.D., P.G., P.E.

Senior Engineer | Water Supply Planning

brian.davis@metc.state.mn.us

P. 651.602.1519

390 North Robert Street | St. Paul, MN | 55101 | metro council.org