Increasing the Effectiveness of Madison’s Water Conservation and Sustainability Plan with Strategic Polling and Analysis

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Introduction

The Madison Water Utility (Madison) applied to the WaterNow Alliance Project Accelerator in June 2019 for support with public polling and research to inform updates to their Water Conservation and Sustainability Plan (Plan). In 2018, Madison achieved a 20% reduction in per-capita residential water use— from 73 gpcd to 58 gpcd— ahead of their 2020 deadline. With plans to update their Plan to further improve efficiency and reduce peak demand, Madison wanted to engage customers to better understand which incentives, programs, and outreach will be most effective.

Polco, an online engagement and polling platform, had offered their services to WaterNow on a pro bono basis for the Spring Project Accelerator. With their partnership, WaterNow selected Madison’s proposal in part to take advantage of the opportunity to support direct public engagement in utility planning and to profile Midwest water conservation programs to understand common practices and programs that encourage customers to conserve water.

Project Approach

The project kicked off in August with public polling to gauge what customers know about their water supply, what conservation measures they’ve taken in the past, and what aspects of sustainability they’d like to see the utility prioritize in the future. The project team collaborated with local organizations to maximize public participation in the survey.

The poll findings were informative. Responses indicated that customers are knowledgeable about where their water comes from, and Madisonians most want to see the utility prioritize providing high-quality, safe water through source water protection and replacing aging water infrastructure. The most common water conservation measures being implemented by
survey participants include:

- Washing only full loads of clothes or dishes
- Outdoor watering during the coolest times of the day
- Installing a low-flow showerheads

Overall, the responses show that Madison customers are knowledgeable about their water supply challenges and actions they can take to reduce their individual water use.

WaterNow also conducted research to help City officials learn more about the types of conservation programs offered in other Midwestern cities. Out of 76 cities investigated by WaterNow, 34 have conservation programs, including financial incentives, educational programs, and codes/regulations. The most common incentive programs were rebates for rain barrels, high efficiency toilets and other indoor appliances. Several cities offer educational programs for K-12 teachers such as student poster contests and mobile education centers. Only a small number of cities have developed water conservation plans, which are relatively common in Western states, although several communities have implemented outdoor watering restrictions.

A second round of polling will take place shortly to build on the first focusing on how much customers would be willing to pay to improve water quality above EPA standards. Madison also wants to learn whether customers are willing to pay more, and how much more, to support disadvantaged customers struggling to pay their water bills. The survey will also solicit feedback on Madison’s current watering restrictions, as well as how customers would like to continue to stay engaged with sustainability planning.

**Project Outcomes**

Based in part on this project work, Madison is positioned to realize significant water savings within the next few years, most tangibly around limiting outdoor watering. Madison City staff is now considering Code updates to require alternate day watering schedules based on the property address, would be a significant change for the City addressing the problem of summer demand increases, typically 25% or more. Outdoor watering limits for residential consumers is expected to reduce their outdoor water use (seasonally) by as much as 32%, or 3.5 million gallons per day. We are also confident that the next round of polling will be instrumental in helping Madison to craft meaningful Updates to its Water Conservation and Sustainability Plan which will be completed in 2021.

*Many thanks to Polco for their support for this project*