

Environment Committee

Meeting date: October 26, 2021

For the Metropolitan Council meeting of November 10, 2021

Subject: Turfgrass Irrigation Efficiency Project with University of Minnesota Turfgrass Science Program, Contract 151103, Amendment Four

District(s), Member(s): All

Policy/Legal Reference: Minnesota Legislature, 2021 First Special Session, Chapter 1, Article 2, Section 8(a)

Staff Prepared/Presented: Brian Davis, 651-602-1519; Ali Elhassan, 651-602-1066

Division/Department: MCES c/o Leisa Thompson, 651-602-8101

Proposed Action

That the Metropolitan Council authorize its Regional Administrator to execute the contract amendment for contract 151103 with the University of Minnesota for continuation of educating citizens of the Twin Cities metro area about lawn water conservation by reinforcing current outreach efforts and creating new educational materials for homeowners in the form of online videos, signs, pamphlets, and in-person workshops. This amendment will be in the amount of \$378,745, for a total contract not to exceed value of \$969,950.

Background

Regionally, landscape irrigation accounts for nearly one quarter of all residential water use, totaling nearly thirty billion gallons per year. As development proceeds, more turfgrass irrigation will result in significant increases in summer water use. The Metropolitan Council is partnering with the University of Minnesota Turfgrass Science Program to investigate and promote methods for increasing turfgrass irrigation efficiency. Through research, demonstration sites, certification programs, and outreach efforts, we seek to teach residents how they can save water, improve lawn health, and help their communities save money by reducing the need for additional water infrastructure. The first contract was for \$122,592 and has been amended twice: once in 2017 for an additional \$199,680, and once in 2019 for an additional \$268,393. This funding has allowed us to collect data and define the problem, as well as begin to focus our outreach and education efforts with the public. We seek to expand our outreach efforts with this funding of the final phase of this project.

Rationale

The Water Supply Planning Unit seeks to improve water efficiency throughout the Twin Cities metropolitan area. Turfgrass irrigation has been growing significantly since the 1990s, increasing the need for water supply wells that are only used during short-term periods of peak demand. Our research has shown the need for improvement in irrigation practices: for example, over 40% of our survey respondents irrigate every other day, which far exceeds what is needed by turfgrass. The severe drought of summer 2021 has focused attention on the need for communities to increase irrigation efficiency and to promote the use of more water efficient turfgrass species. A recent article by Minnesota Public Radio (linked below) shows the fruits of our partnership with the University: taking the research that we have conducted in previous years and bringing it to our communities to help educate and inform their residents. This outreach is what we seek to focus on in the coming three years.

<https://www.mprnews.org/story/2021/09/09/drought-sparks-interest-in-watersaving-alternatives-to-thirsty-lawns>

Thrive Lens Analysis

This action advances the Thrive outcomes of Stewardship and Sustainability and the water sustainability goal of the Water Resources Policy Plan. Increased turfgrass irrigation efficiency will help protect our aquifers and reduce water utility rates in the long term. Communities are increasing their adoption of water efficient irrigation practices as a result of this project, which is making a difference in decreasing the rate of growth of water demand in developing communities. This project is helping shape the development of the Master Water Supply Plan Update in the next three years.

Funding

The Turfgrass Irrigation Efficiency project is funded by Clean Water, Land and Legacy Amendment funds through the Minnesota Legislature, 2021 First Special Session, Chapter 1, Article 2, Section 8(a): \$919,000 the first year and \$919,000 the second year are to implement projects that address emerging threats to the drinking water supply, provide cost-effective regional solutions, leverage interjurisdictional coordination, support local implementation of water supply reliability projects, and prevent degradation of groundwater resources in the metropolitan area.

Known Support / Opposition

No known opposition. Metro Area Water Supply Advisory Committee supports the program.