

**WORK SESSION STAFF REPORT**  
**Work Session Item No. 3**

**Date:** June 1, 2020  
**To:** City Council  
**From:** Rick DeGardner, Public Services Director  
**Re:** Reducing Water Demand Due to Manganese Levels

**Background**

City staff continues to manage the manganese issue since we were notified by the Minnesota Department of Health (MDH) in November, 2019. A letter was sent to all Lino Lakes residents followed by an informational meeting on January 22, 2020. A page on the City's website has been developed to provide residents a designated place to obtain relevant information. The City Council approved a water treatment feasibility study in March, and we anticipate the results being presented to the City Council during the July 6 work session.

City staff has been regularly monitoring the overall manganese levels since December 4, 2019. In addition to listing the individual readings on the website, we are also providing a monthly summary as shown below:

<b>MONTH</b>	<b># READINGS</b>	<b>AVERAGE-PPB</b>	<b>HIGH-PPB</b>	<b>LOW-PPB</b>
MAY, 2020*	18	<b>127</b>	173	83
APRIL, 2020	22	<b>101</b>	154	56
MARCH, 2020	22	<b>96</b>	160	67
FEBRUARY, 2020	19	<b>102</b>	144	52
JANUARY, 2020	20	<b>110</b>	148	67
DECEMBER, 2019	17	<b>151</b>	331	117

\*Thru May 27, 2020

The City has been keeping the level of manganese in the water supply low by only running wells that produce water with the lowest manganese levels. Warmer outdoor temperatures usually correlate to increasing demand of water, primarily lawn watering. Consequently, other wells will soon be needed to meet the higher water demands. Manganese levels will likely be higher when these additional wells are operating.

On May 18, an announcement requesting help to reduce water demand was placed on the City's website (see attached). Staff continues to be concerned that the increased watering of lawns will result in an overall increase in manganese levels in our water supply.

Staff has identified three options for consideration in our efforts to reduce water demand over the next several months:

- Request voluntary compliance/cooperation and reevaluate during July 6 work session
- Expand daily watering ban from 10:00am - 6:00pm to 6:00am - 6:00pm

- Enact complete watering ban with exceptions of hand watering of plants using a hose, and irrigating or watering of new landscaping, sod, or seed within 28 days of installation

Option 1 - Request voluntary compliance/cooperation and reevaluate during July 6 work session

All customers would be requested to reduce water demand, including limiting watering lawns to a maximum of once per week. Staff would provide additional manganese testing data at the July work session to determine whether additional measures are warranted.

Options 2 - Expand daily watering ban from 10:00am - 6:00pm to 6:00am - 6:00pm

Currently, the highest volume demand for water occurs in the early morning hours. This results in the need to turn on additional (higher manganese levels producing) wells. The intent of this option is to reduce the daily peak water demand which will minimize the frequency/duration of operating higher manganese producing wells.

Option 3 - Enact complete watering ban with exceptions of hand watering of plants using a hose, and irrigating or watering of new landscaping, sod, or seed within 28 days of installation

City Code 401.03 (see attached) grants the City Administrator or Director of Public Services to implement emergency measures, if necessary, with a total prohibition on sprinkling.

Upon city council direction, the website would be updated. Also, an informational letter to all customers connected to our water supply system could be sent out making them aware of the circumstances.

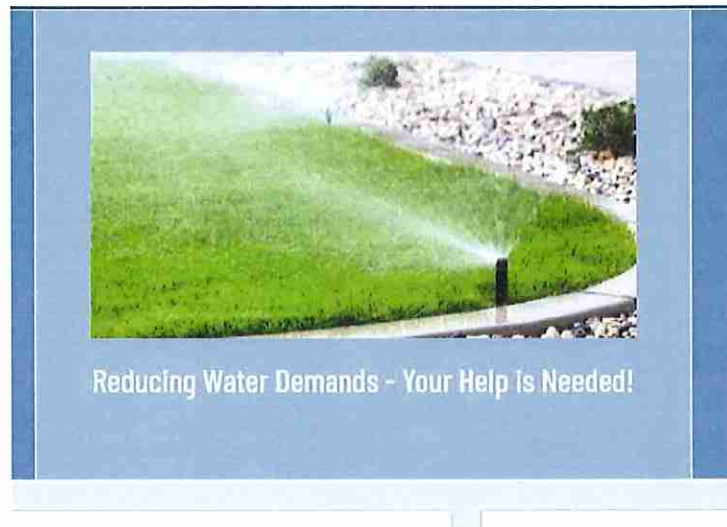
**Requested Council Direction**

Staff is seeking further direction

**Attachments**

May 18 website announcement

City Code 401.03 - Use of Water Restricted to Authorized Persons



Reducing Water Demands – Your Help is Needed! The City has been keeping the level of manganese in the water supply low by only running wells that produce water with the lowest manganese levels. Warmer outdoor temperatures usually correlate to increasing demand of water, primarily lawn watering. Consequently, other wells will soon be needed to meet the higher water demands. Manganese levels will likely be higher when these additional wells are operating. Many lawns only require 1” of water per week. Current watering restrictions include odd/even watering and no watering between 10:00am - 6:00pm daily. Everyone connected to the municipal water supply is strongly encouraged to minimize the frequency and duration of watering lawns. This will hopefully reduce the need to utilize wells with higher manganese levels.

Click on [Public Water Advisory](#) for additional information on the manganese issue.

May 18, 2020



**§ 401.03 USE OF WATER RESTRICTED TO AUTHORIZED PERSONS.**

(1) *Use of water restricted to authorized persons. No person shall make, construct or install any water service installation or make use of any water service which is connected to the water system except in the manner provided in this chapter.*

(2) *Annual water use restrictions. To protect the health and safety of the consumers and the general welfare of the city, and to encourage water conservation, the city hereby adopts the following permanent restrictions.*

(a) *The irrigating or watering of lawns and gardens is prohibited from May 15 to September 15 each year; provided, however, that odd-numbered property addresses may water on odd-numbered days, and even-numbered property addresses may water on even-numbered days.*

(b) *Homeowner's associations, apartment complexes or any property that provide a common irrigation system may water only every other day.*

(c) *Water can not be used for the purposes of irrigating or watering lawns, gardens, sod or seeded areas between 10:00 a.m. and 6:00 p.m. daily and year around.*

(3) *Authority to restrict use. The City of Lino Lakes hereby reserves the right to limit the use of water from the city water supply and distribution system and to prescribe emergency conditions for use of water. The City Administrator or Director of Public Services may in his or her discretion implement emergency measures if necessary supplementing the sprinkling ban under division (1) with a total prohibition on sprinkling.*

(4) *Exceptions. The water use restrictions in § 401.03(1) do not apply in the following situations.*

(a) *Hand watering of plants using a hose.*

(b) *Irrigating or watering of new landscaping, sod or seed within 28 days of installation. A permit for 28-day new landscaping, sod or seed watering will be required; or*

(c) *Property owners using a private well for sprinkling.*

(5) *Violation. No person shall cause water to be used in violation of the provisions of this section. The first violation shall result in a \$25 citation, and a \$50 subsequent citation for those individuals who repeat violations.*