

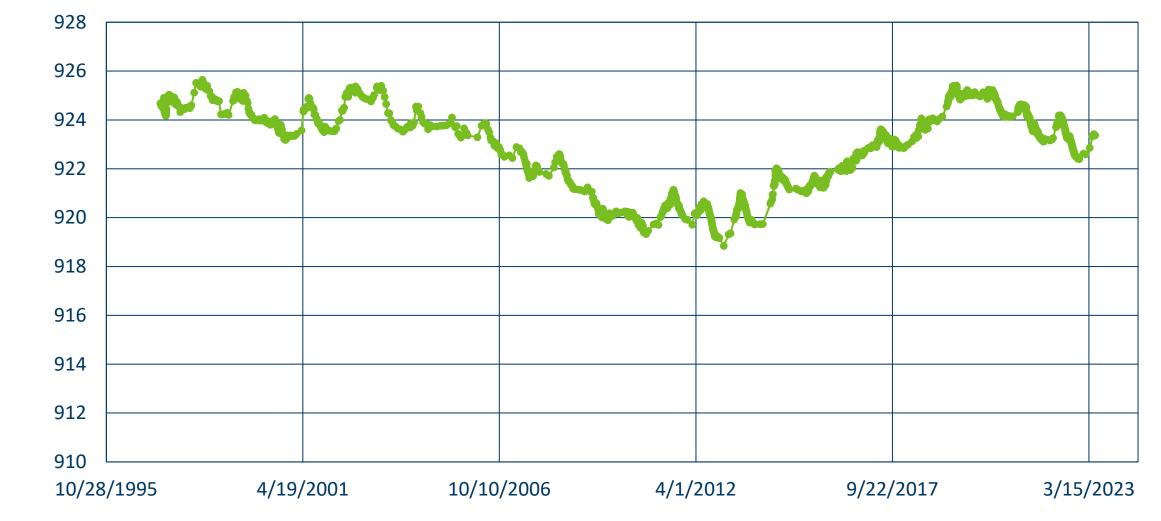
## Lake water level and groundwater level update

North and East Metro Groundwater Management Area 13<sup>th</sup> Advisory Team Meeting June 27, 2023

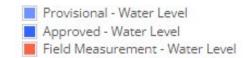


Jason Moeckel, Manager

Inventory, Monitoring and Analysis Section

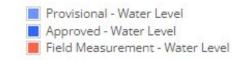


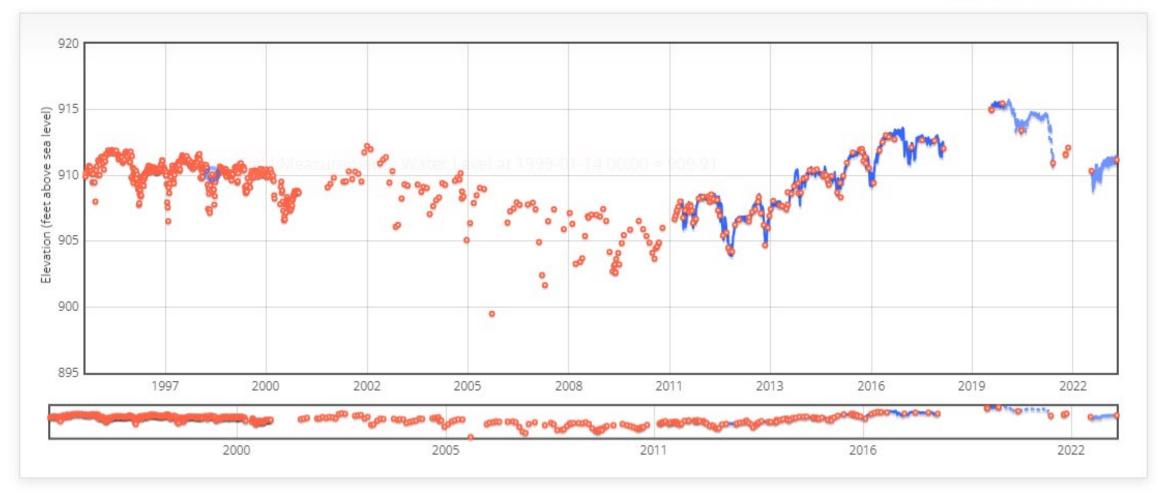
#### White Bear Lake - Water Elevation (5/1/1997 - 3/15/2023)





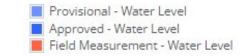
Aquifer Levels - Prairie Du Chien, Hugo

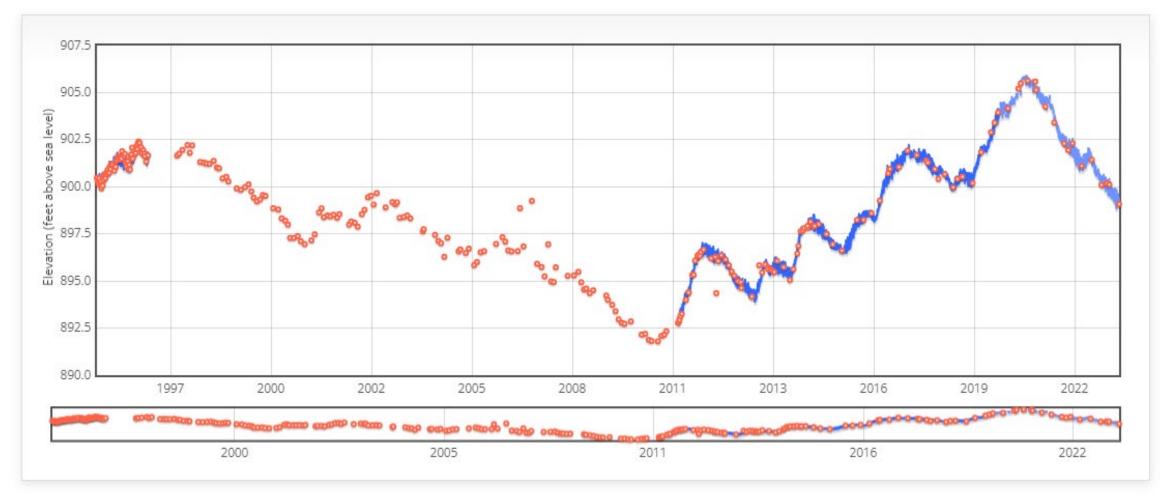




### Aquifer Levels - Prairie Du Chien, White Bear Lake

#### Displayed range 1995-05-11 to 2023-03-23 Reset





### Aquifer Levels - Prairie Du Chien - Lake Elmo, Lake Jane



## Water Appropriation and Conservation Update

North and East Metro Groundwater Management Area 13<sup>th</sup> Advisory Team Meeting June 27, 2023

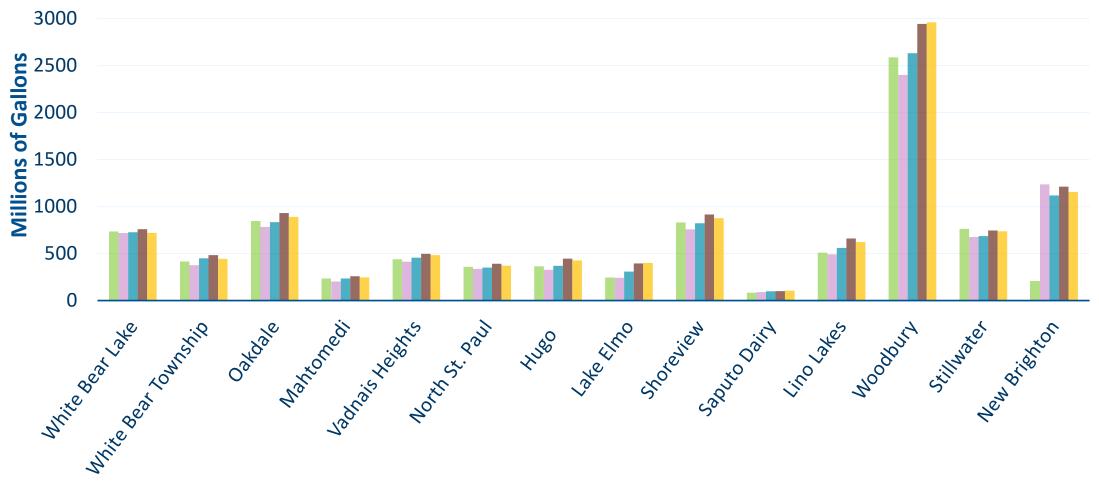
Dan Miller

Project Manager

North and East Metro GWMA

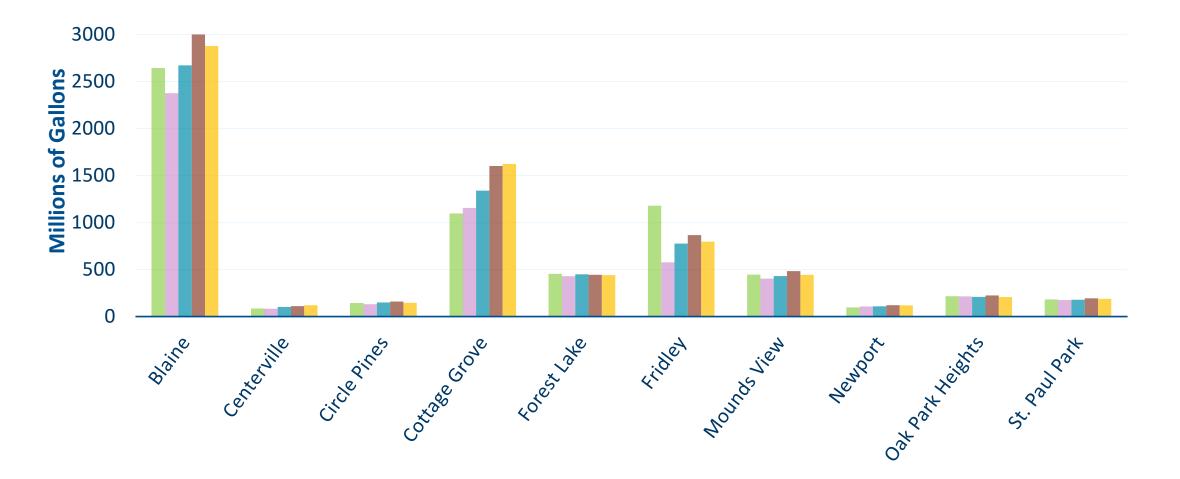


## 2018 through 2022 Reported Water Use



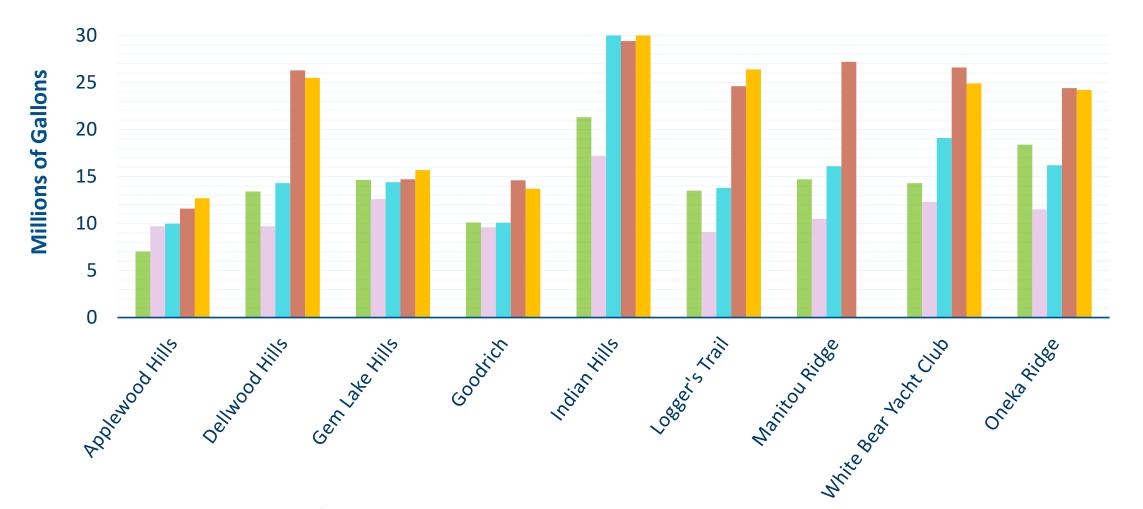
**Top 14 Influencers on WBL Water Levels** 

## 2018 through 2022 Reported Water Use



**Other Municipal Appropriation Permittees** 

## 2018 thru 2022 Reported Water Use



**Golf Course Irrigation Permittee** 

## Water Conservation Accomplishments in 2022

Bayport: 540,000 gallons – 60 SF Irrigation Controllers

Cottage Grove: 1.35 MG - 150 Single Family (SF) Irrigation Controllers

Fridley: 9 MG - leak detection and repair and 3 MG hydrant repair

Hugo: 31.6 MG - water reuse at Adelaide Landing community development area and 2.37 MG for irrigation controller upgrades at city-owned sites

New Brighton: 540 K gal. – toilet retrofits

Oakdale: 2 MG – reducing unauthorized water use and 1.5 MG for irrigation meters in-house

St. Paul: 1.87 MG – high volume customer leak detection and repairs

White Bear Township: 2.32 MG - leak detection and repair and storage mixing

Woodbury: 4.47 MG - nearly 500 SF irrigation controllers and 2.36 MG thru nearly 250 toilet retrofits

# **Business Example**

Bailey Nurseries – Nord Farm in Cottage Grove

- 4 acres of new greenhouses = 20% increase in farm operation
- 2017 MnTAP project
- Capturing runoff and tile drainage and reusing for greenhouse irrigation
- Pond to storage tanks
- Potential to save up to 20 MGY of groundwater

# **Questions/Comments**

Ecological and Water Resources Division Minnesota Department of Natural Resources