

Water Quality Monitoring – Wastewater Treatment Plant Groundwater Monitoring

Monitoring Purpose



The Metropolitan Council Environmental Services (MCES) has been monitoring groundwater at various wastewater treatment plant locations since 1975, to determine the impacts of past bio-solids disposal practices on local groundwater quality. Groundwater monitoring has been conducted for planning purposes, and to meet National Pollutant Discharge Elimination System (NPDES) and state monitoring requirements.

Monitoring Sites

Currently groundwater monitoring is conducted at 5 well sites at the Seneca Wastewater Treatment Plant ash disposal site. Routine water elevation monitoring is conducted at 13 additional well sites and flow is measured at two stream sites, Kennealy and Harnack Creeks, adjacent to the Seneca Wastewater Treatment Plant located in Eagan, MN.

Additionally, there are 29 wells at the Metropolitan Wastewater Treatment Plant which are routinely monitored for water elevation.

Groundwater Variables Analyzed

- Temperature
- pH
- Conductivity
- Alkalinity
- Chloride
- Sulfate

Soluble Analytes:

- Aluminum
- Arsenic
- Barium
- Cadmium
- Calcium
- Chromium
- Copper
- Iron
- Lead
- Magnesium
- Mercury
- Nickel
- Potassium
- Selenium
- Sodium
- Zinc

Monitoring Equipment

- Bailers
- Cooler with ice
- Distilled deionized water
- Field sheets
- Filtering apparatus and filters
- Labeled sample containers
- Power inverter
- Pumps
- Tape measure
- Toolbox
- Tubing
- Velocity meter
- Water level meter
- Well keys
- YSI multi-meter

Monitoring Data and Reports

Groundwater monitoring data collected by MCES is used for internal planning, and is also provided to its permitting agencies; Minnesota Department of Natural Resources, and Minnesota Pollution Control Agency.

For further information on wastewater treatment plant groundwater monitoring, please contact Scott Schellhaass via [email](#) or at 651.602.8341.