

Monthly Quality Update May 2023



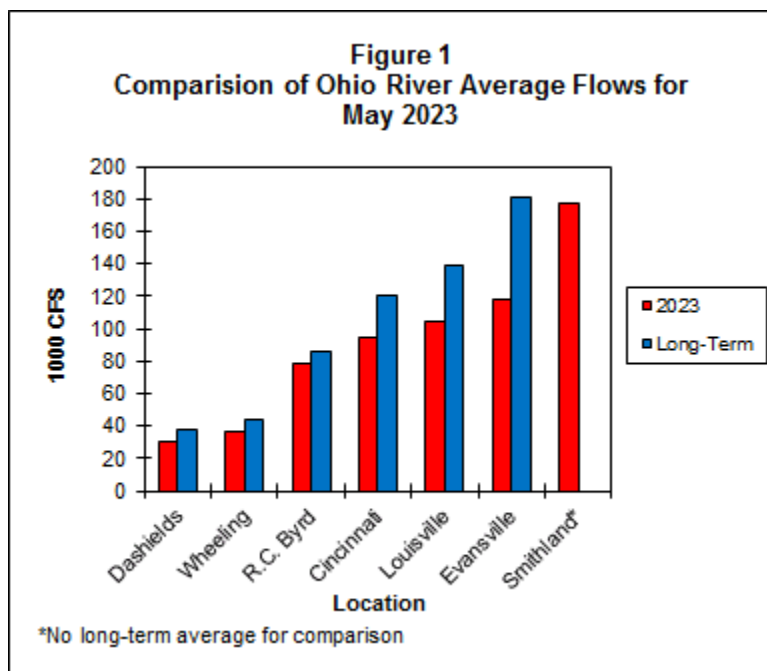
OHIO RIVER VALLEY WATER SANITATION COMMISSION

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Flows

Average flows at seven Ohio River locations are displayed below. At each location the May 2023 average flow (red bar) is contrasted with the long-term average monthly flow (blue bar).



Bacteria

The bacteria monitoring results from five of the six Ohio River locations in May are in the attached graphs. Unfortunately, Pittsburgh had boat engine issues and has not been able to sample this year. Wheeling and Huntington, WV added Fecal Coliform analysis this season. ORSANCO's water quality criteria for the protection of human health during the contact recreation season are:

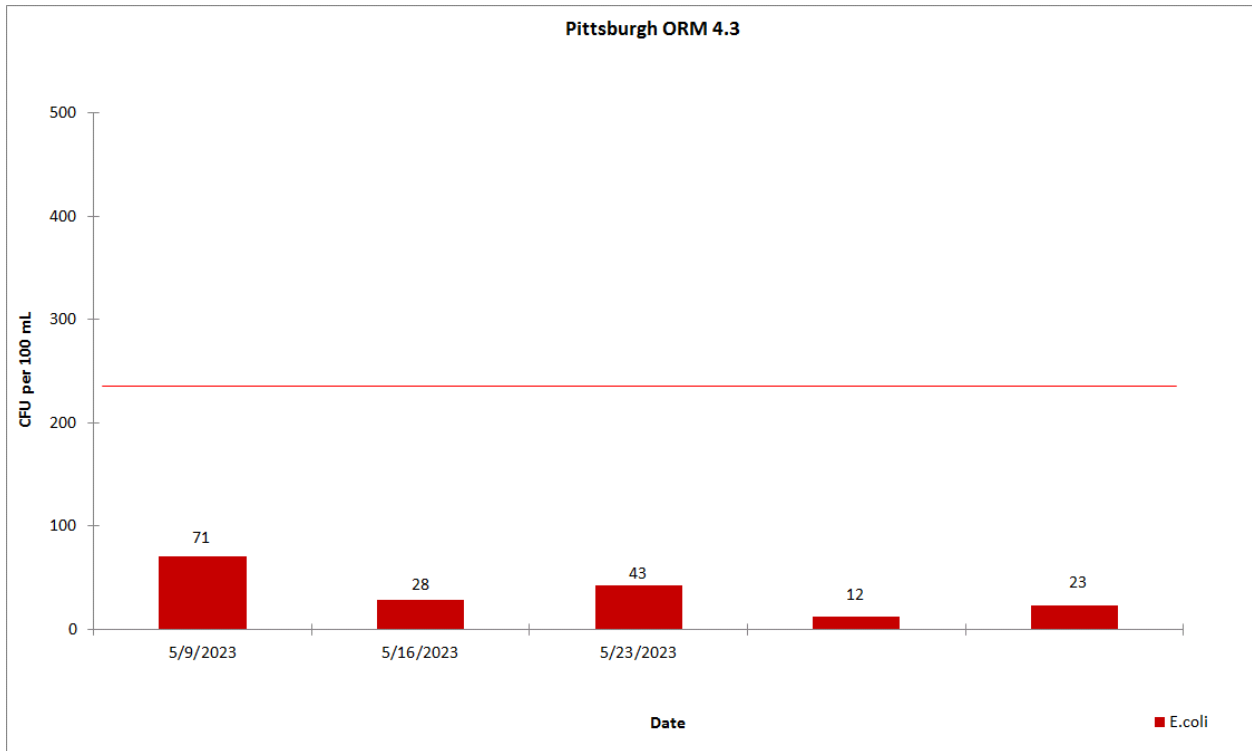
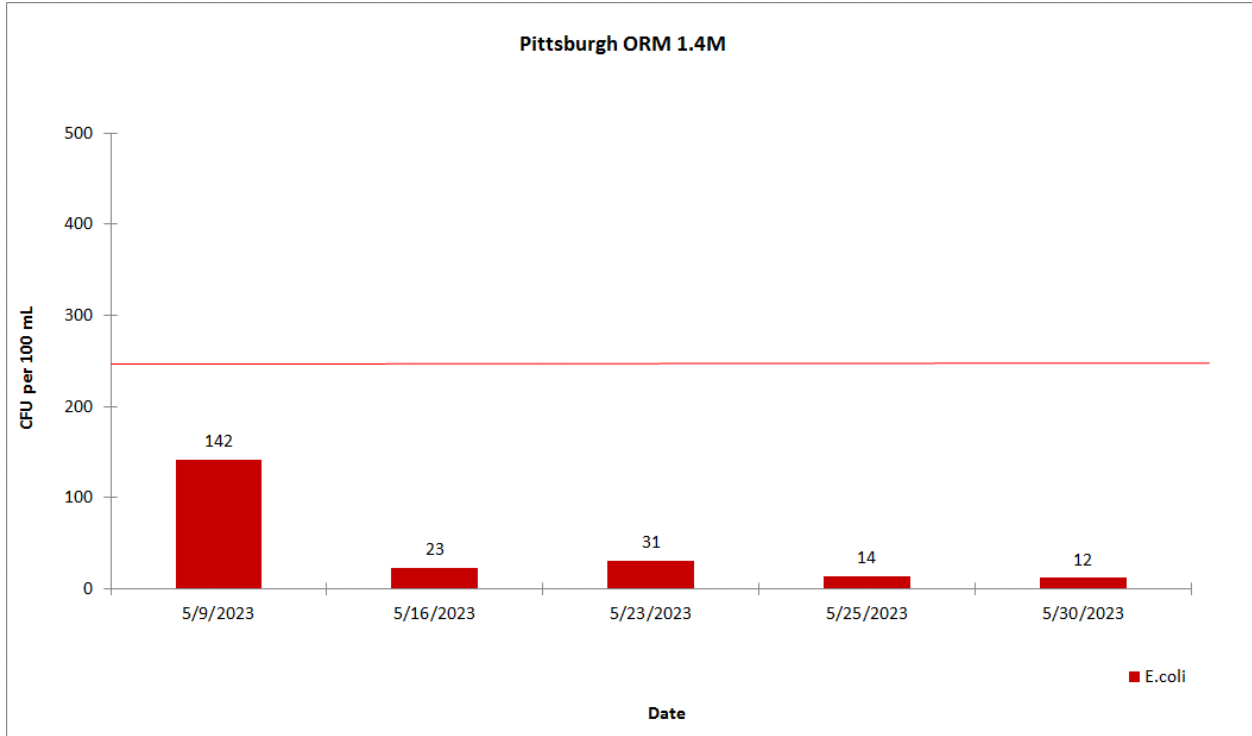
- *E. coli* count is not to exceed 240 CFU/100mL in more than 25 percent of samples. (*E. coli* is shown with a red line on the graph.)
- *E. coli* shall not exceed 130 CFU/100mL as a 90-day geometric mean, based on not less than five samples per month.

ORSANCO's water quality criteria for the protection of public water supply year round are:

- Fecal Coliform shall not exceed 2,000/100mL as a monthly geometric mean based on not less than five samples per month.

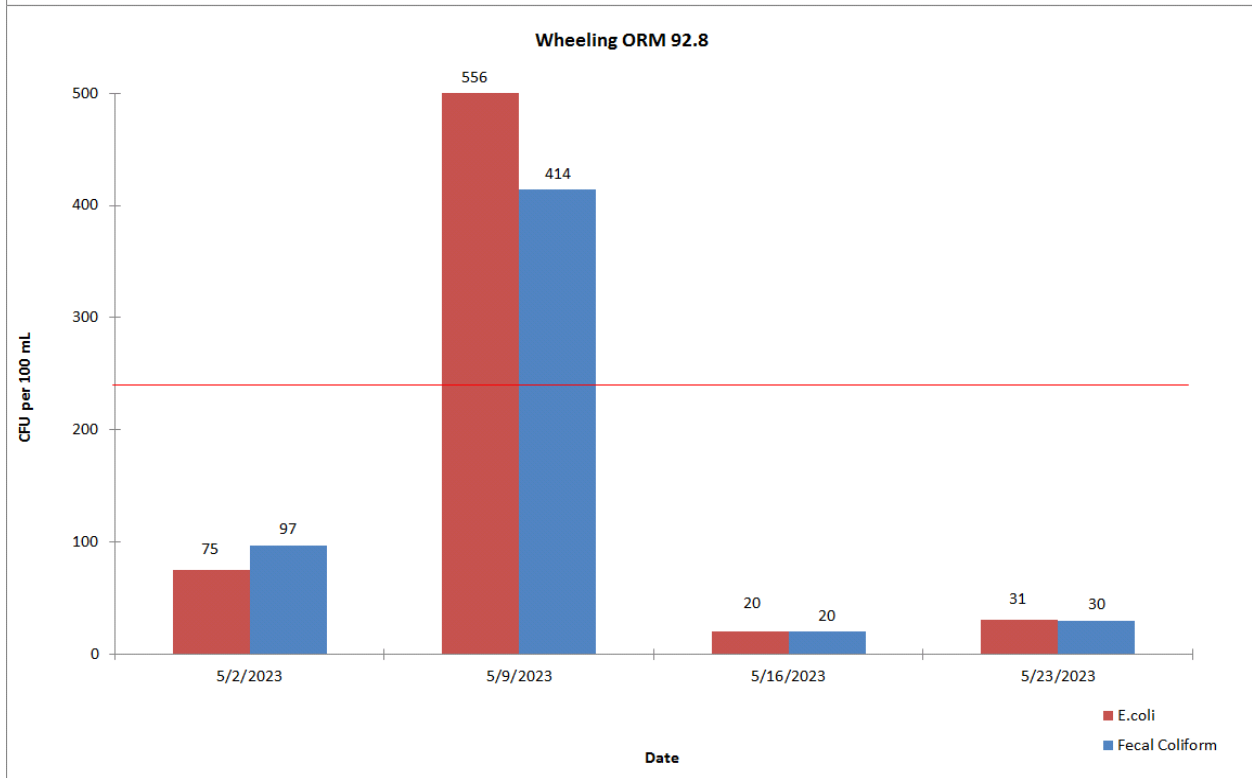
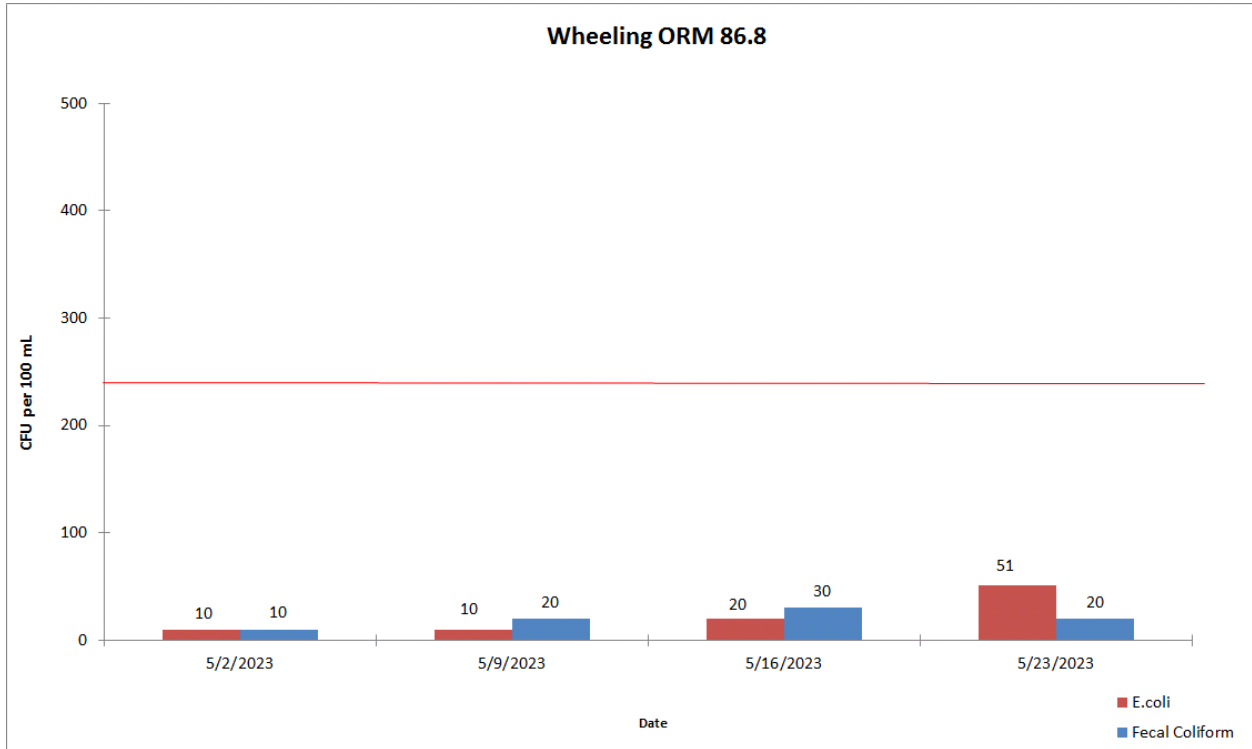
Pittsburgh

In Pittsburgh, ORM 1.4M and 4.3M did not exceed the *E.coli* criteria for May.



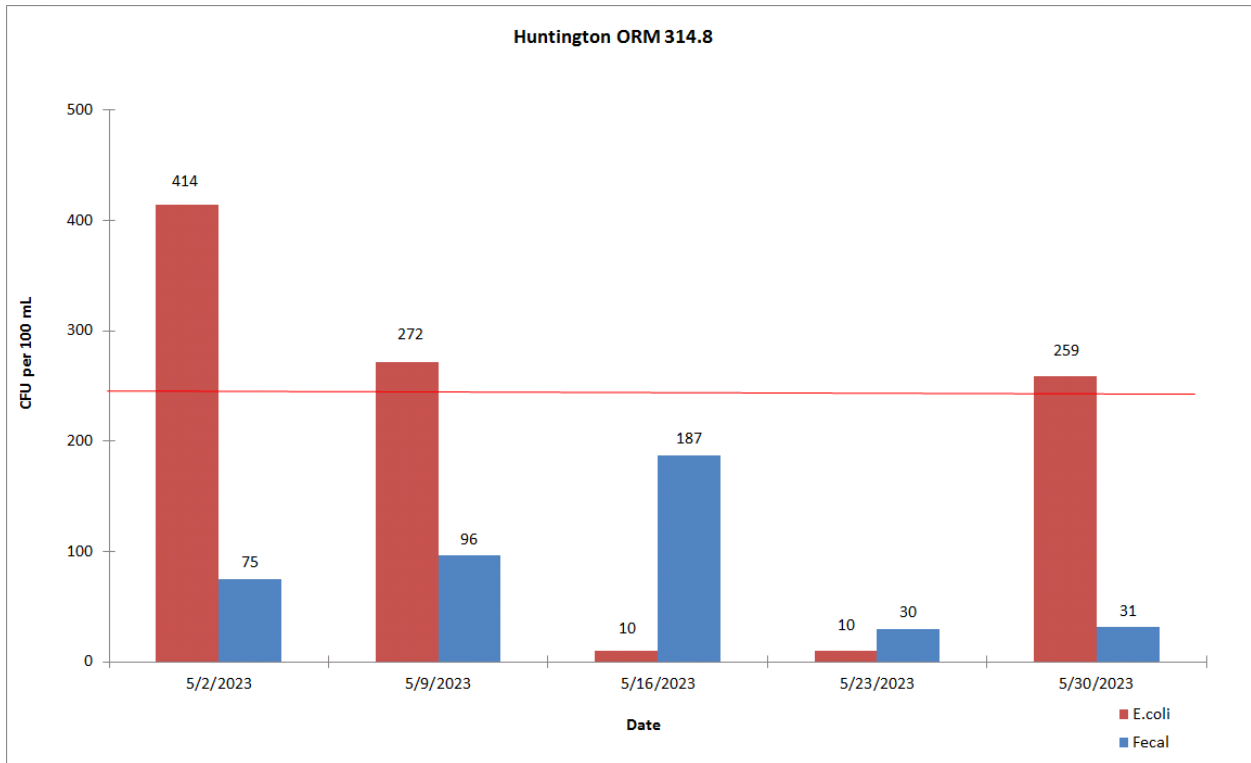
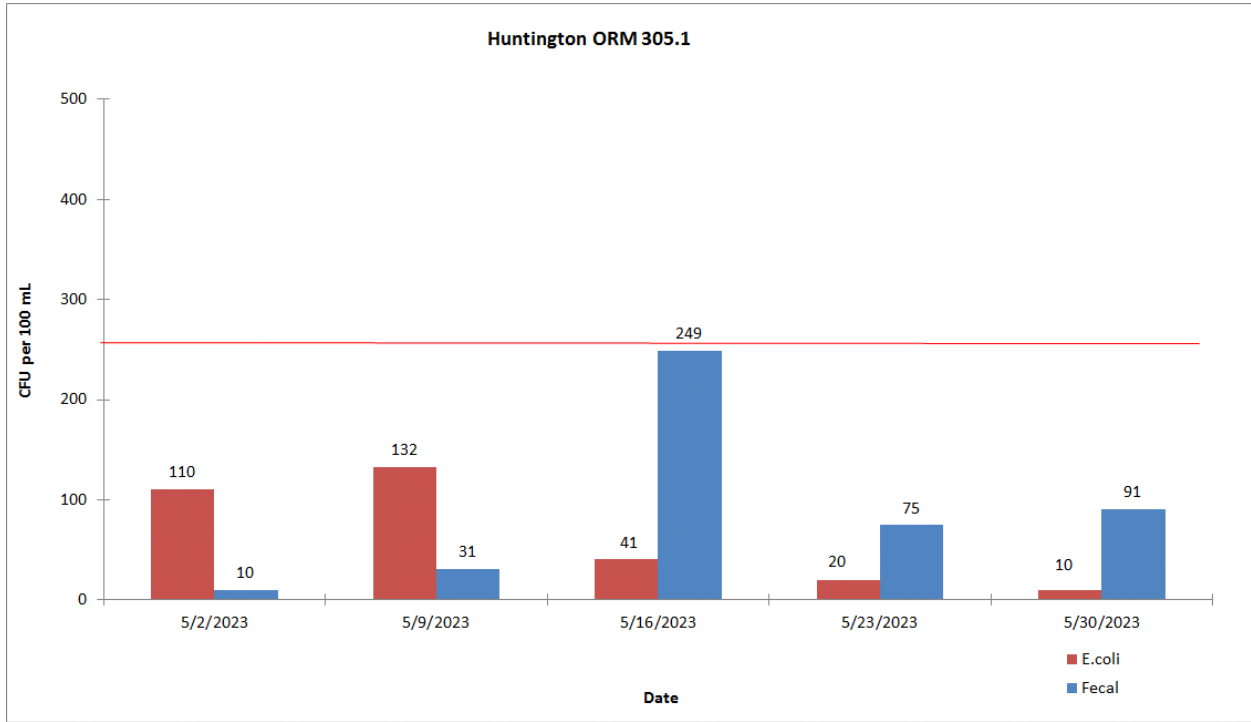
Wheeling

In Huntington, ORM 86.8 did not exceed the *E.coli* criteria. ORM 92.8 had one individual exceedance for *E.coli*.



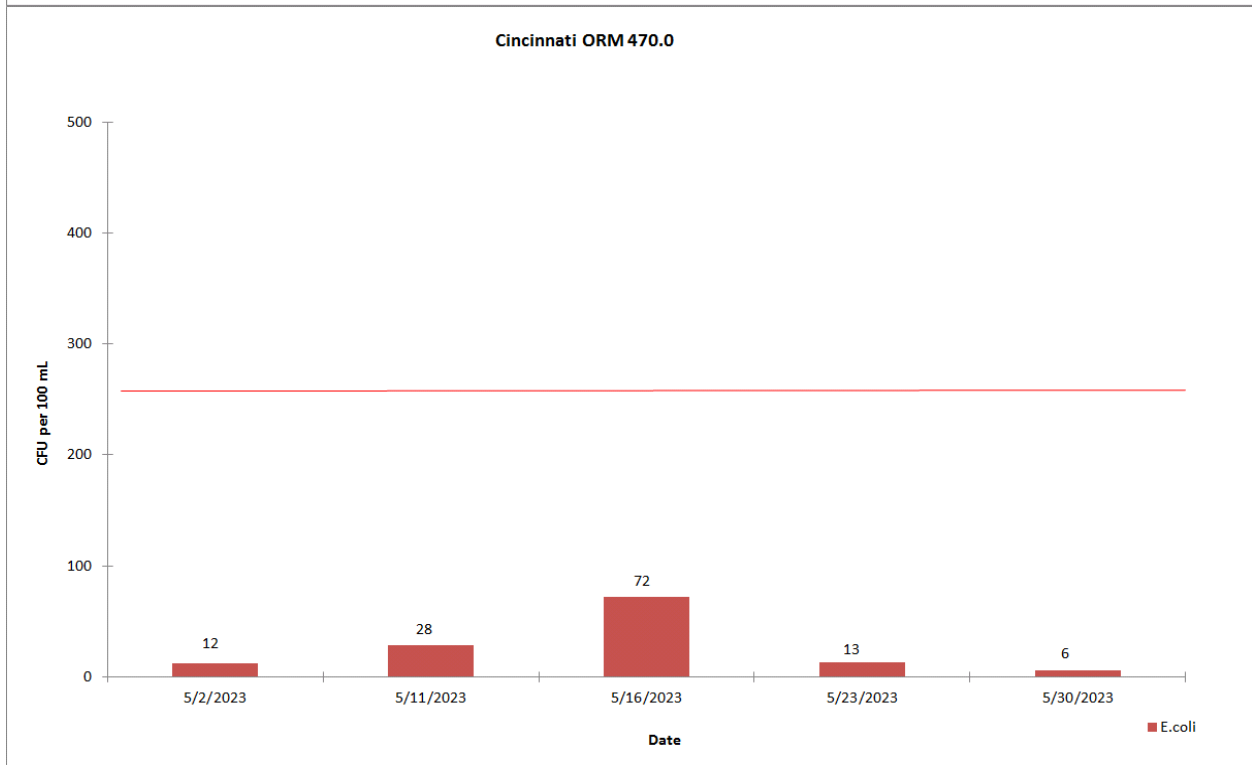
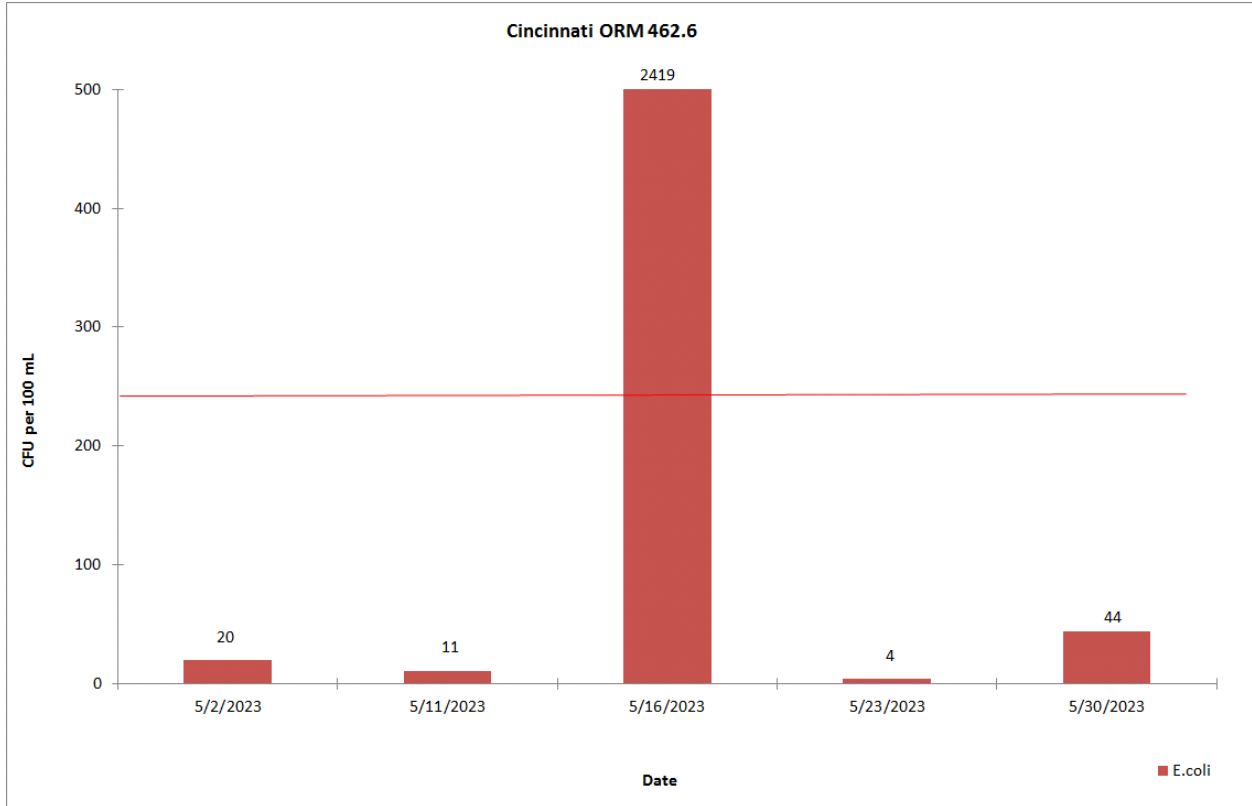
Huntington

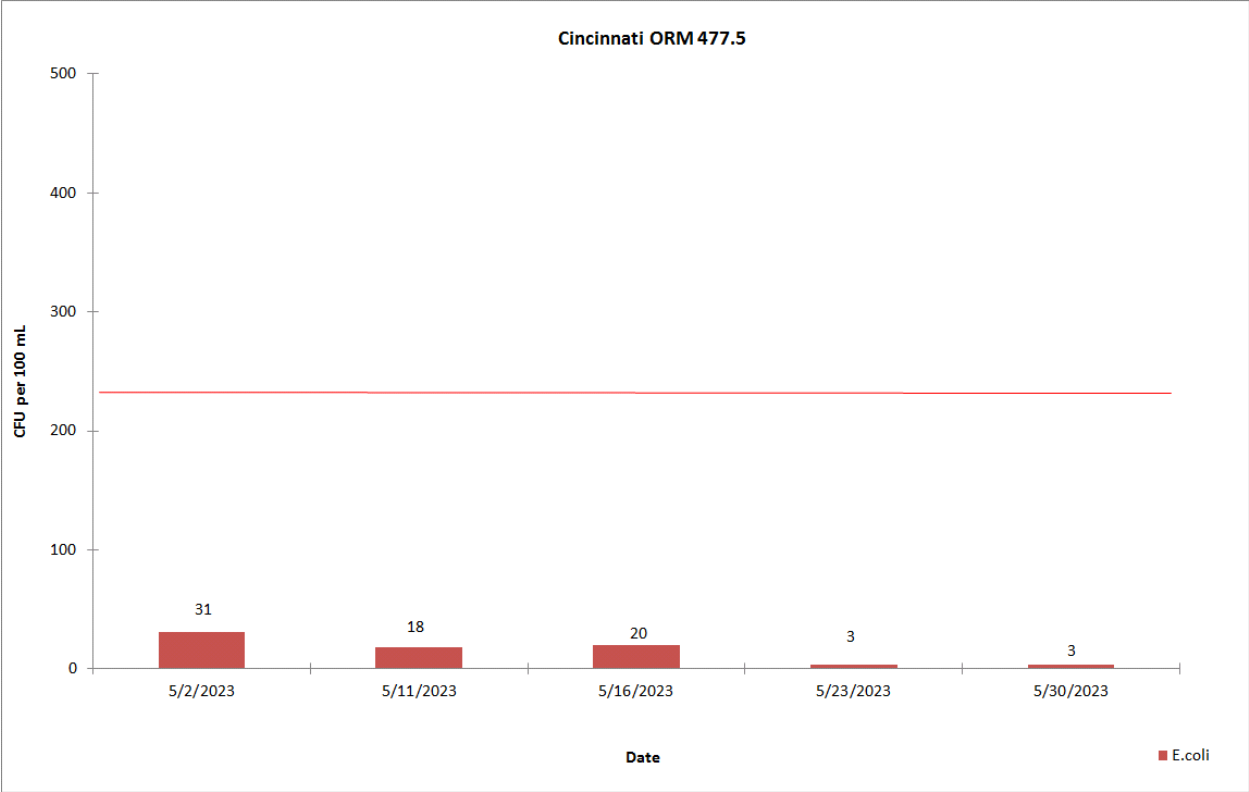
In Huntington, ORM 305.1 did not exceed the *E.coli* criteria. ORM 314.8 had three individual exceedances for *E.coli*.



Cincinnati

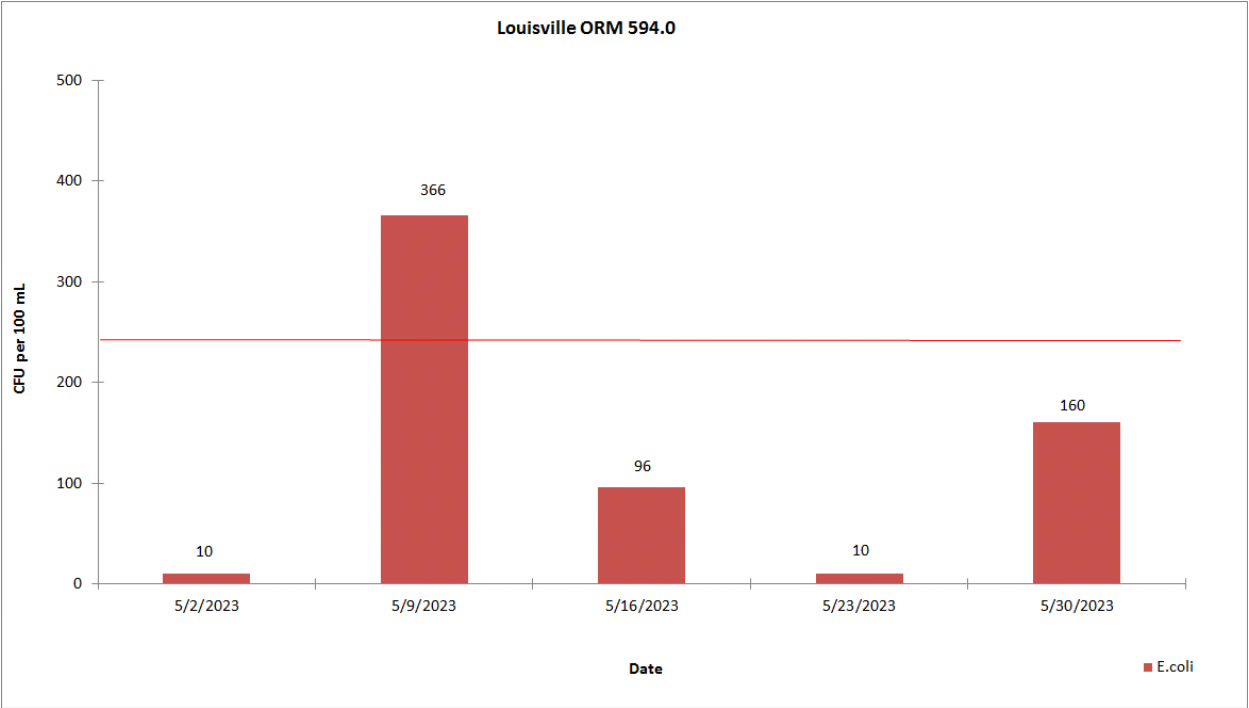
In Cincinnati, ORM 462.6 had one individual exceedance for *E.coli*. ORM 470.0 and ORM 477.5 did not exceed the *E.coli* criteria.

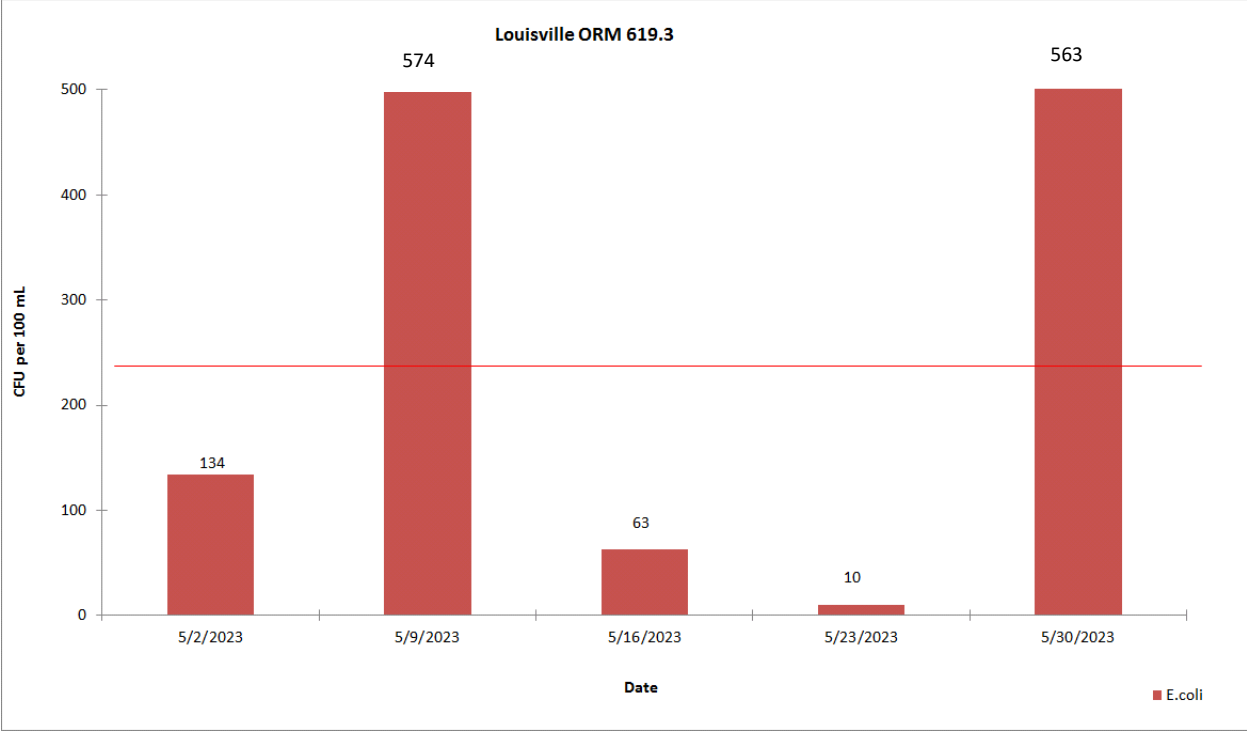




Louisville

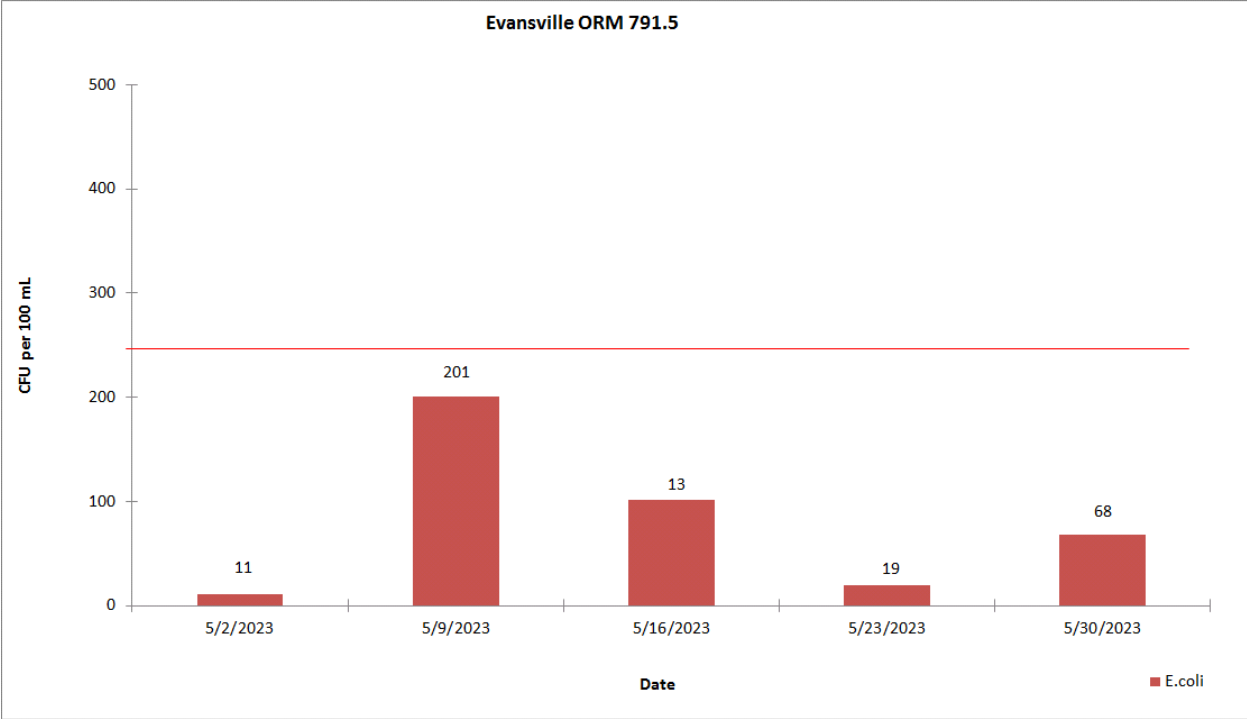
In Louisville, ORM 594.0 had one individual exceedance for *E.coli*. ORM 619.3 had two individual exceedances for *E.coli*.

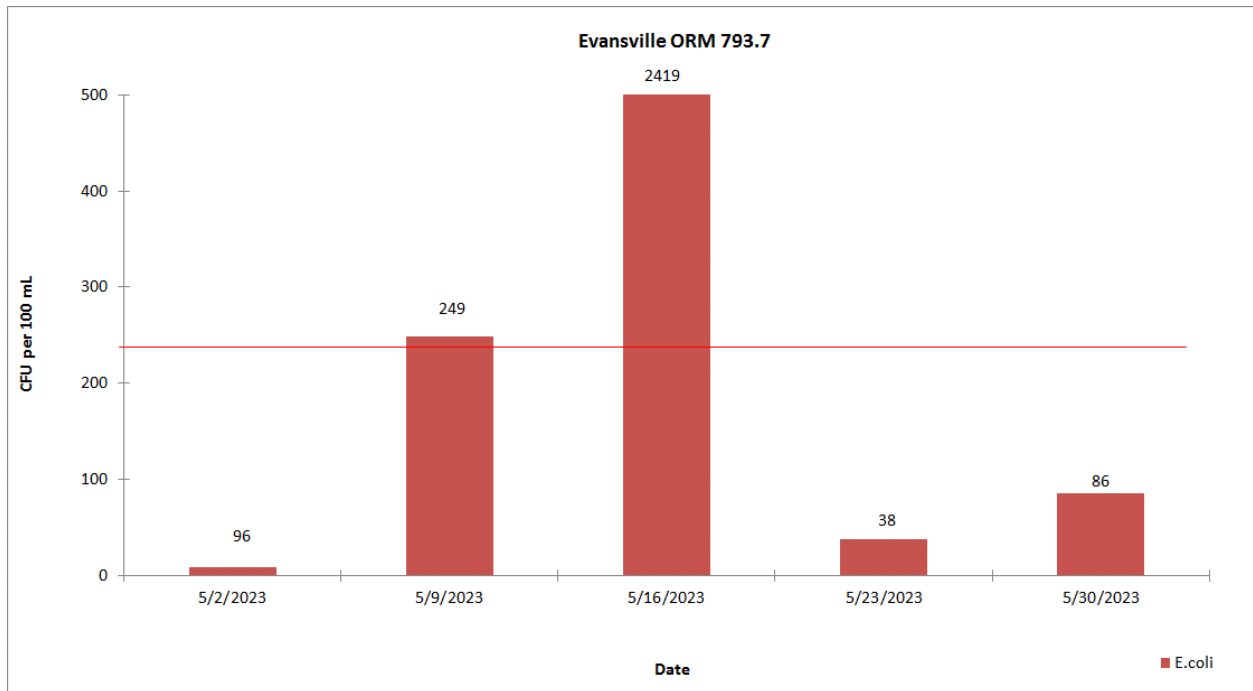




Evansville

In Evansville, ORM 791.5 did not exceed the *E.coli* criteria. ORM 793.7 had two individual exceedances for *E.coli*.





Dissolved Oxygen and Temperature

A summary of the dissolved oxygen and temperature readings collected in May 2023 are displayed in the attached tables. During the months of May through October, ORSANCO interrogates eleven stations for dissolved oxygen (D.O.) and temperature data once per day, Monday through Friday, for the previous 24-hour period. This data is compiled in-house to produce a report showing the minimum, maximum and average of the acquired D.O. and temperature readings. This year Olmstead was added and the results are instantaneous data. ORSANCO's water quality criteria for the protection of warm water aquatic life habitat are:

- The minimum D.O. concentration shall not be less than 4.0 mg/L at any time.
- Average D.O. concentration shall be at least 5.0 mg/L for each calendar day.
- During the April 15 – June 15 spawning season, a minimum D.O. concentration of 5.0 mg/L shall be maintained at all times.
- The monthly average of the daily maximum for May is:
 - 71.2 °F at MP 0 to MP 341.
 - 76.4 °F at MP 341.1 to MP 606.8.
 - 71.4 °F at MP 606.9 to MP 981.

There were no criteria violations during the month of May for D.O. or temperature.

Please click on the link below to be directed to the DO/Temperature tables for May 2023:
<http://www.orsanco.org/dissolved-oxygen-and-temperature>

Atrazine

Evansville drinking water utility samples the Ohio River at their intake and analyzes for atrazine by immunoassay technique. Results for May 2023 are presented below. Evansville had no criteria violations of the Maximum Contaminant Level (MCL) of 3.0 ug/L set by the Safe Drinking Water Act for finished drinking water.

