

Monthly Quality Update September 2023



OHIO RIVER VALLEY

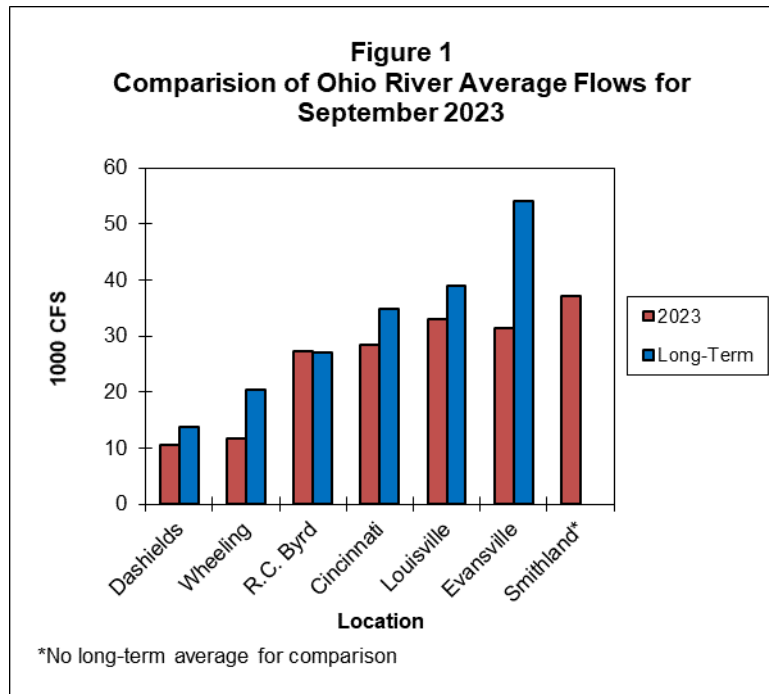
WATER SANITATION COMMISSION

5735 Kellogg Avenue, Cincinnati, Ohio 45230

(513) 231-7719 Fax (513) 231-7761

Flows

Average flows at seven Ohio River locations are displayed below. At each location the September 2023 average flow (red bar) is contrasted with the long-term average monthly flow (blue bar). Flows were below average in the upper River and above average in the lower River during the month of September.



Bacteria

The bacteria monitoring results from five of the six Ohio River locations in September are in the attached graphs. ORSANCO's water quality criteria for the protection of human health during the contact recreation season are:

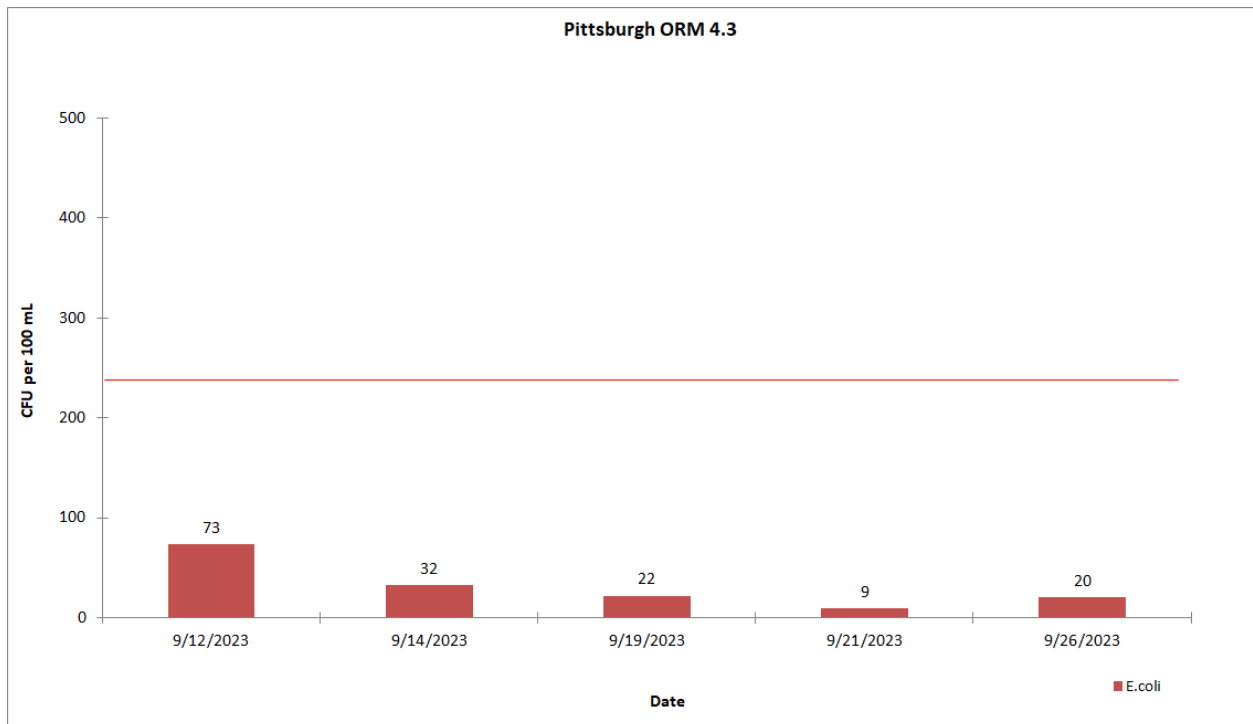
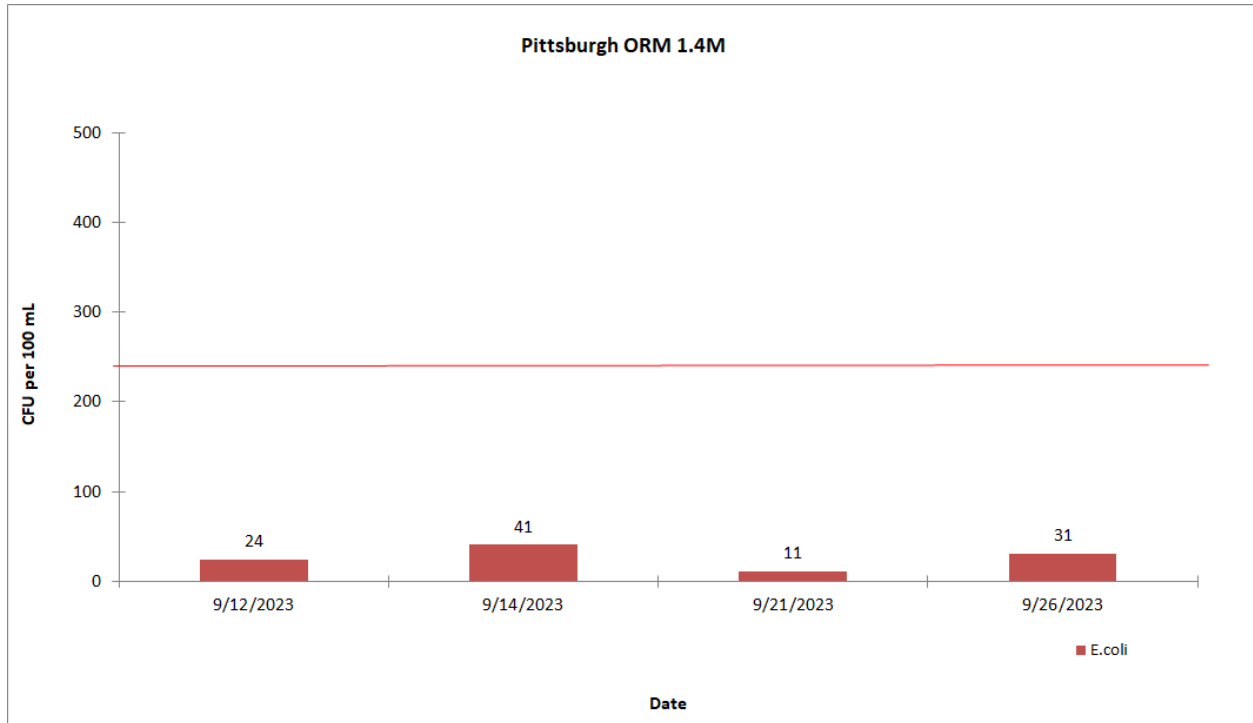
- *E. coli* count is not to exceed 240 CFU/100mL in more than 25 percent of samples. (*E. coli* is shown with a red line on the graph.)
- *E. coli* shall not exceed 130 CFU/100mL as a 90-day geometric mean, based on not less than five samples per month.

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.

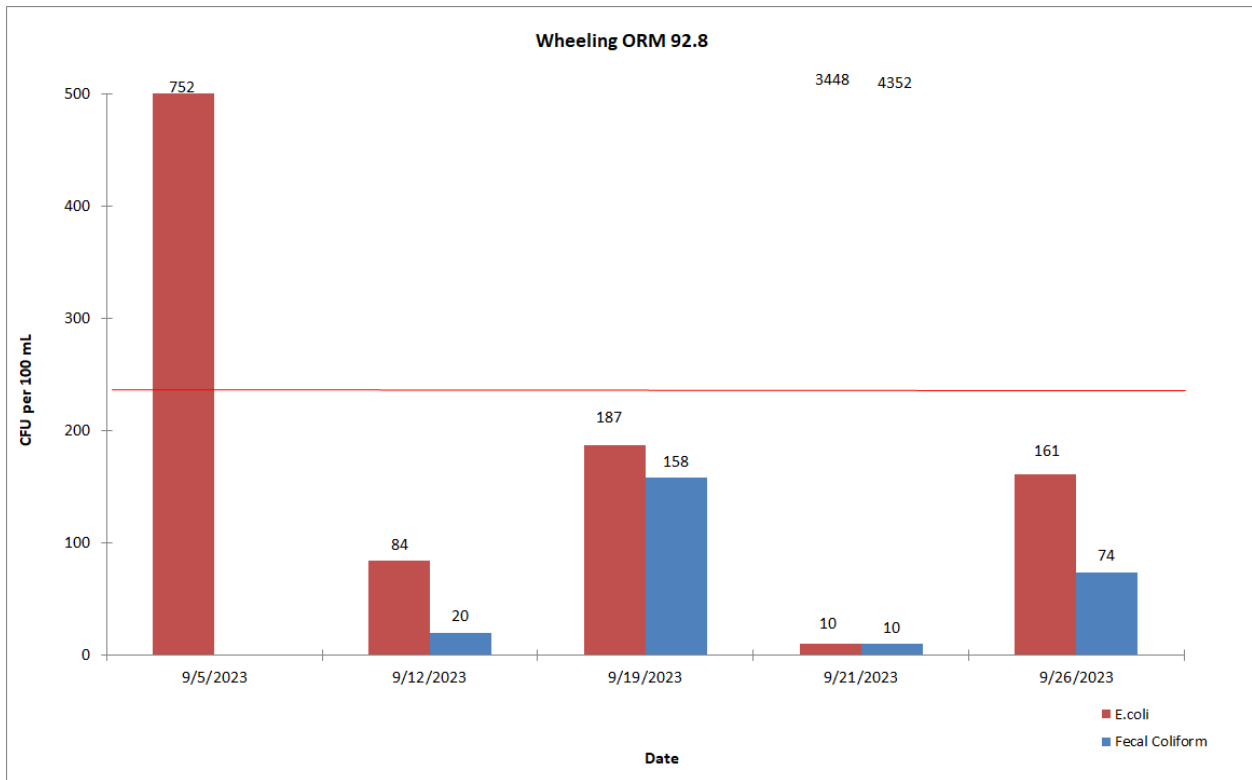
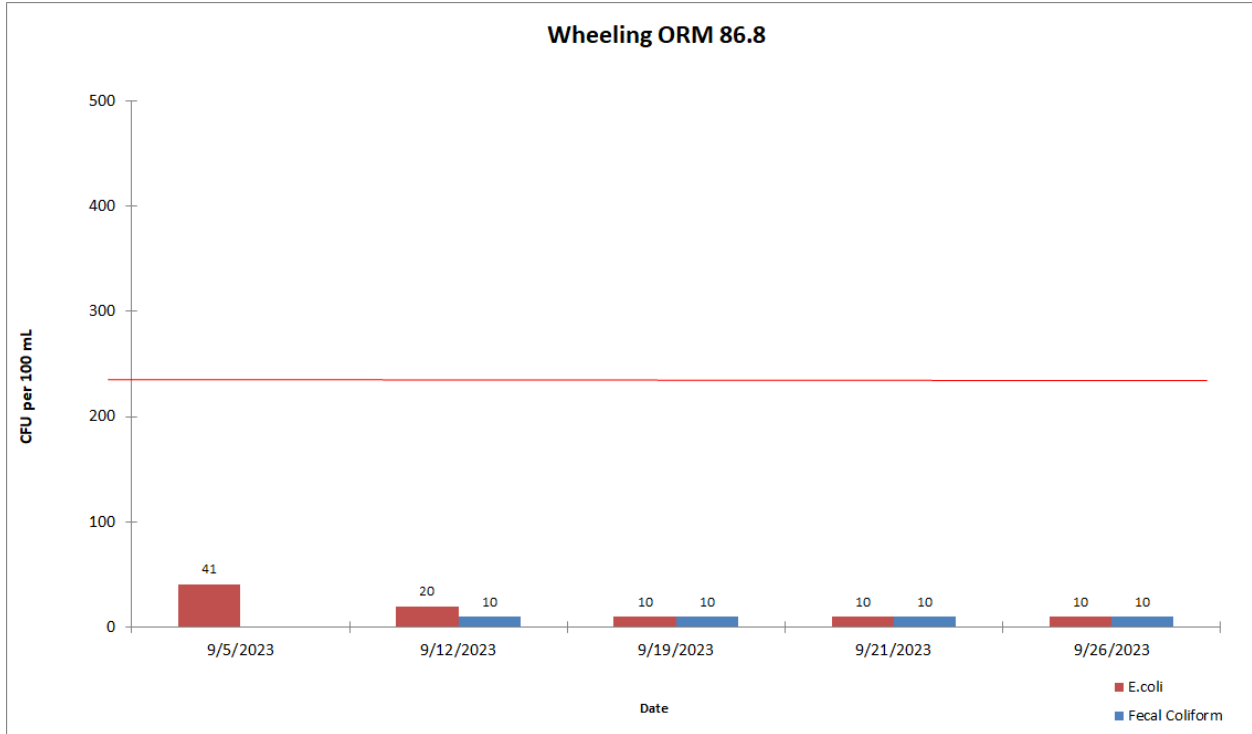
Pittsburgh

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



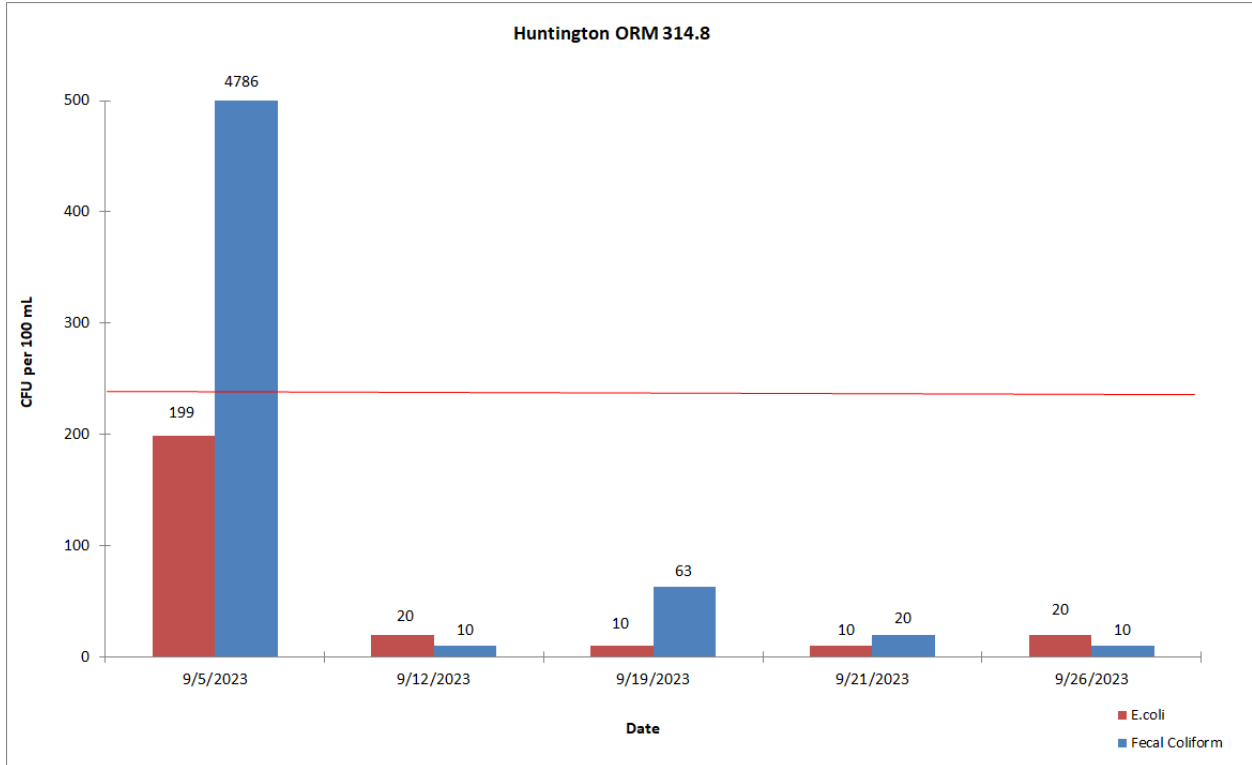
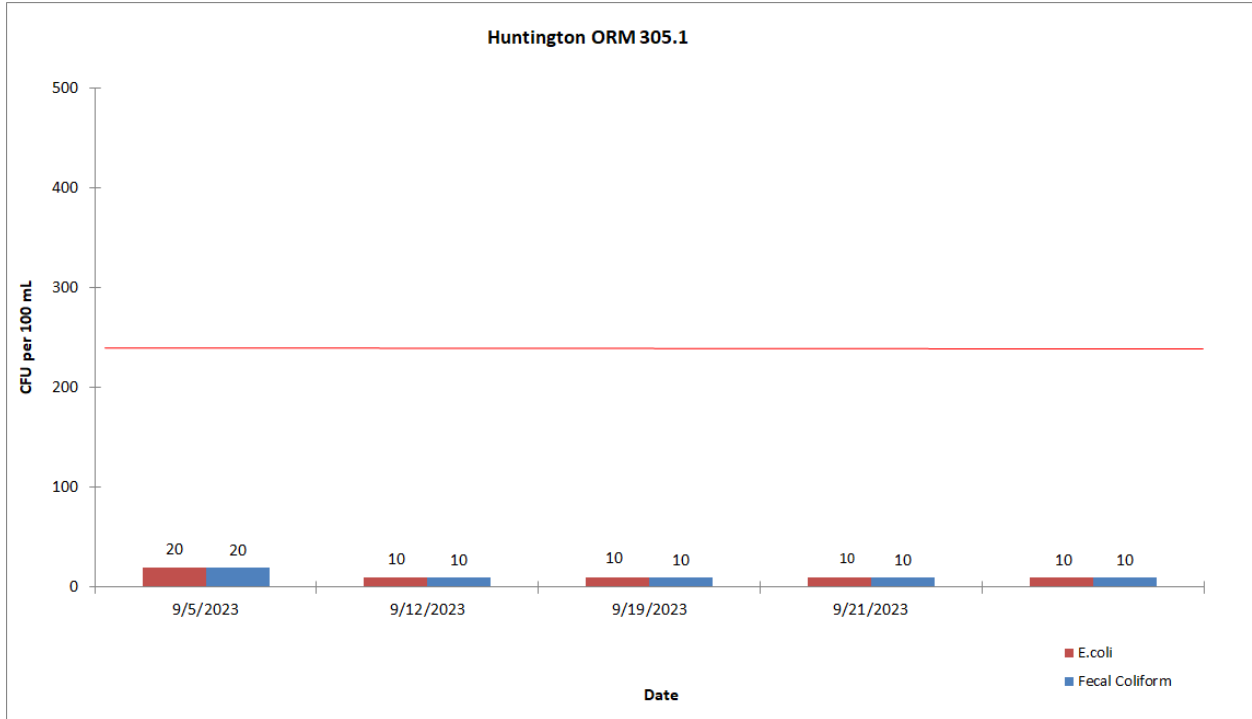
Wheeling

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



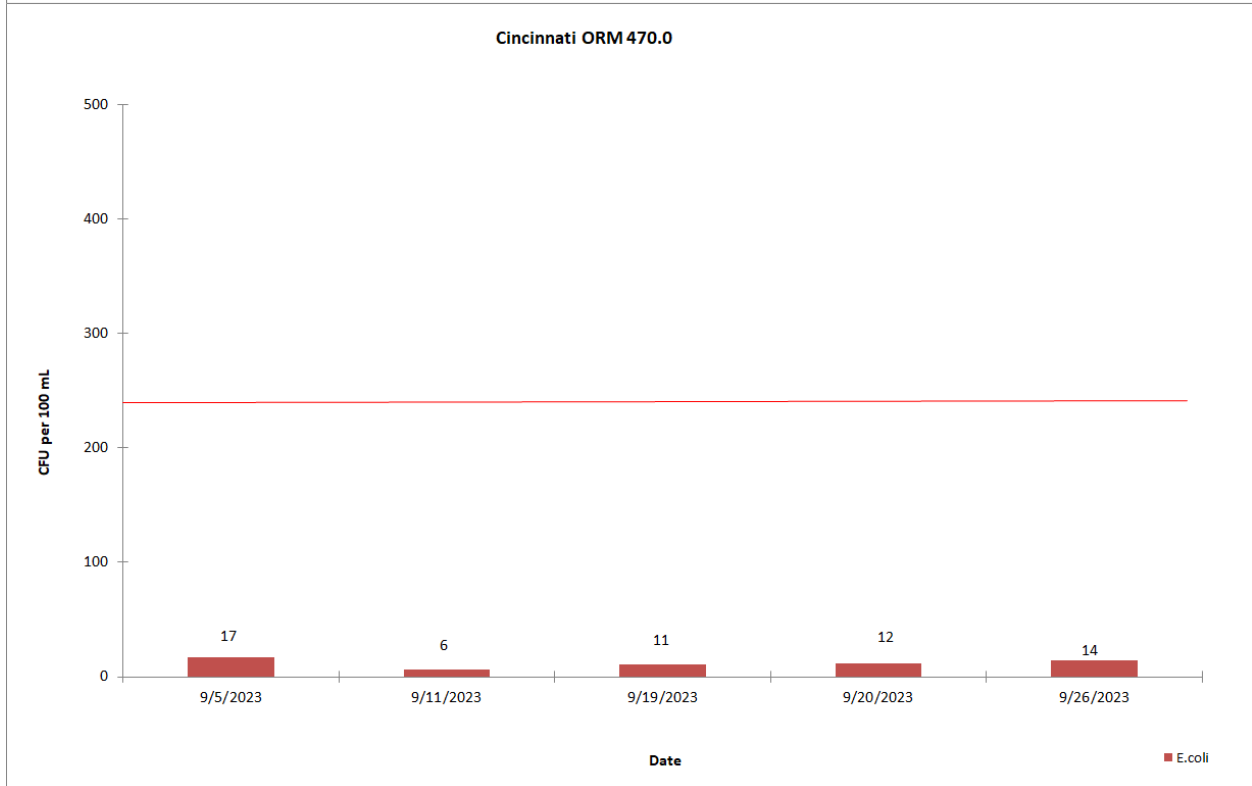
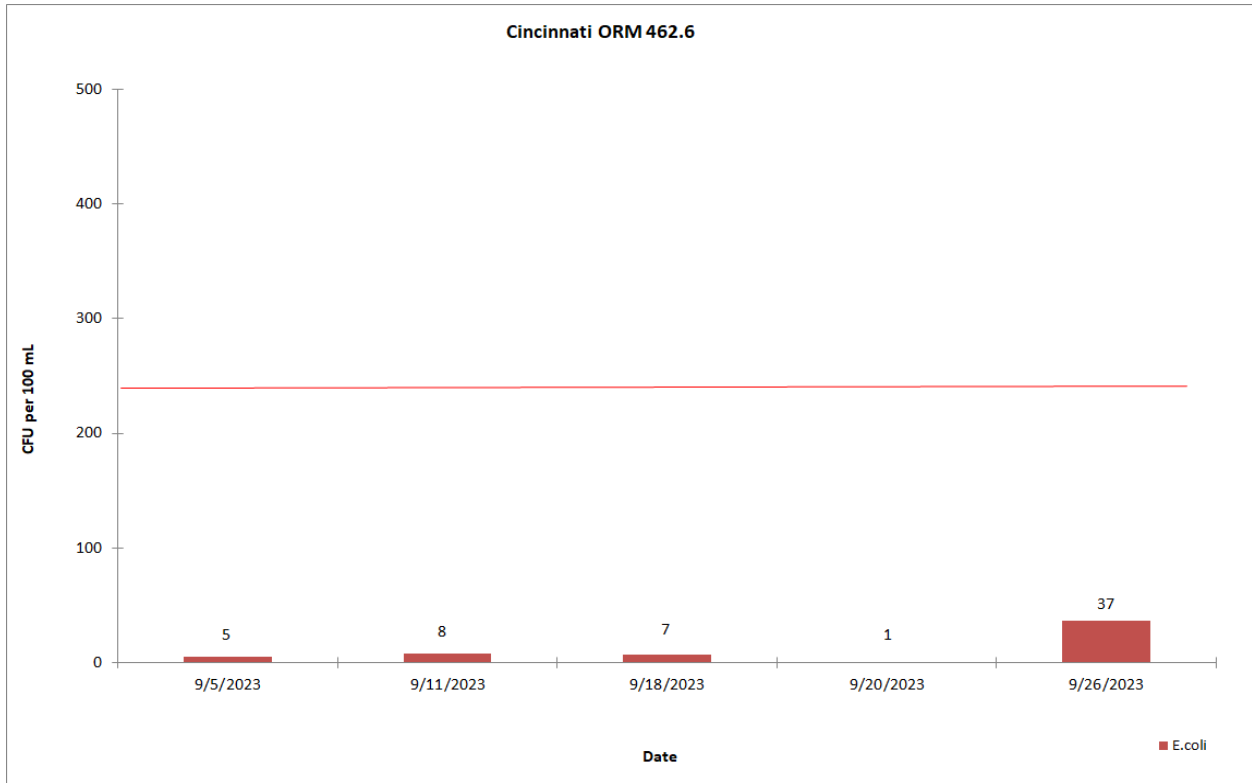
Huntington

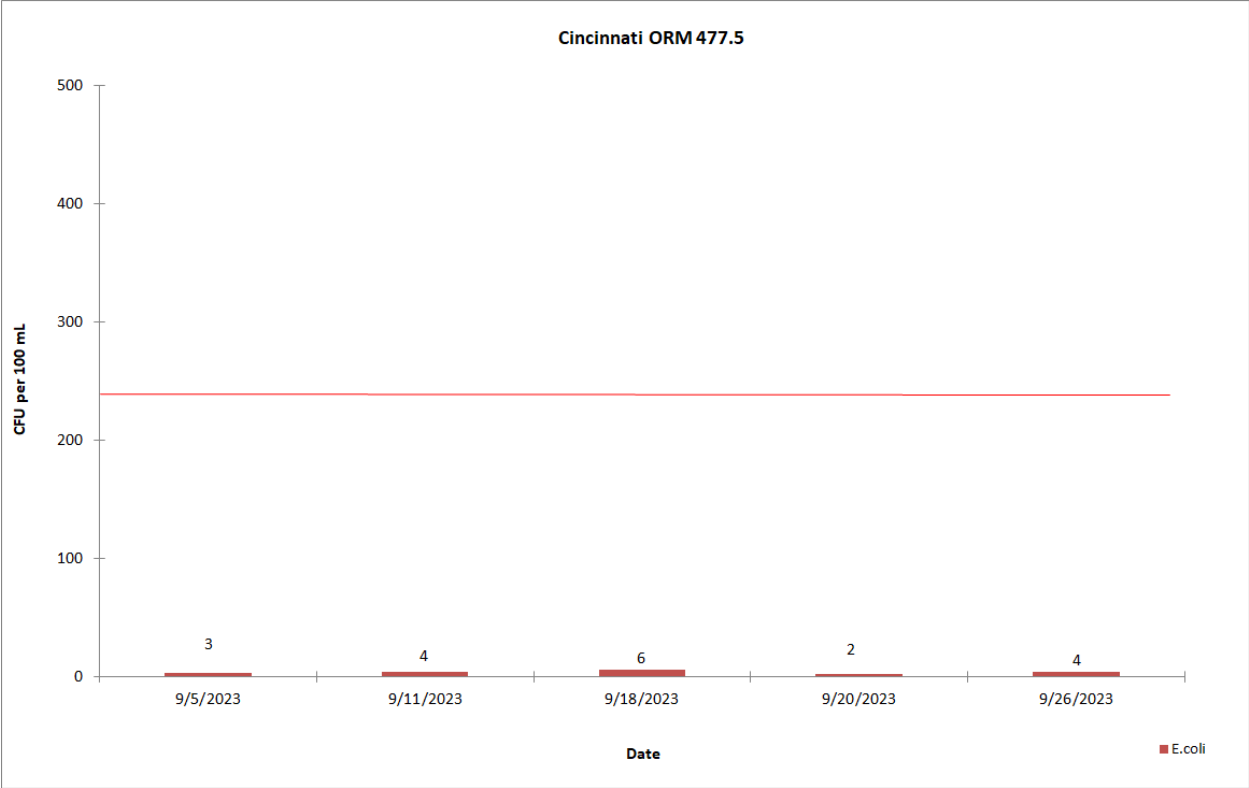
In Huntington, ORM 305.1 and ORM 314.8 did not exceed the *E.coli* criteria.



Cincinnati

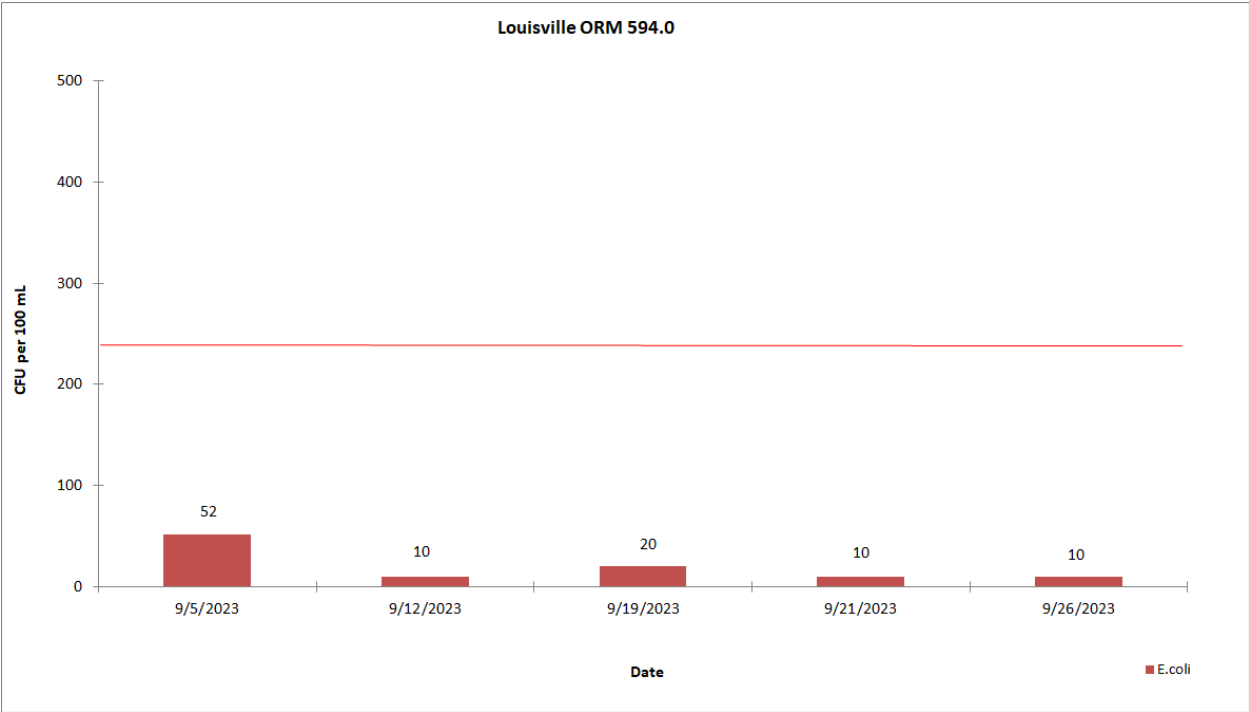
In Cincinnati, ORM 462.6, ORM 470.0 and 477.5 did not exceed the *E.coli* criteria.

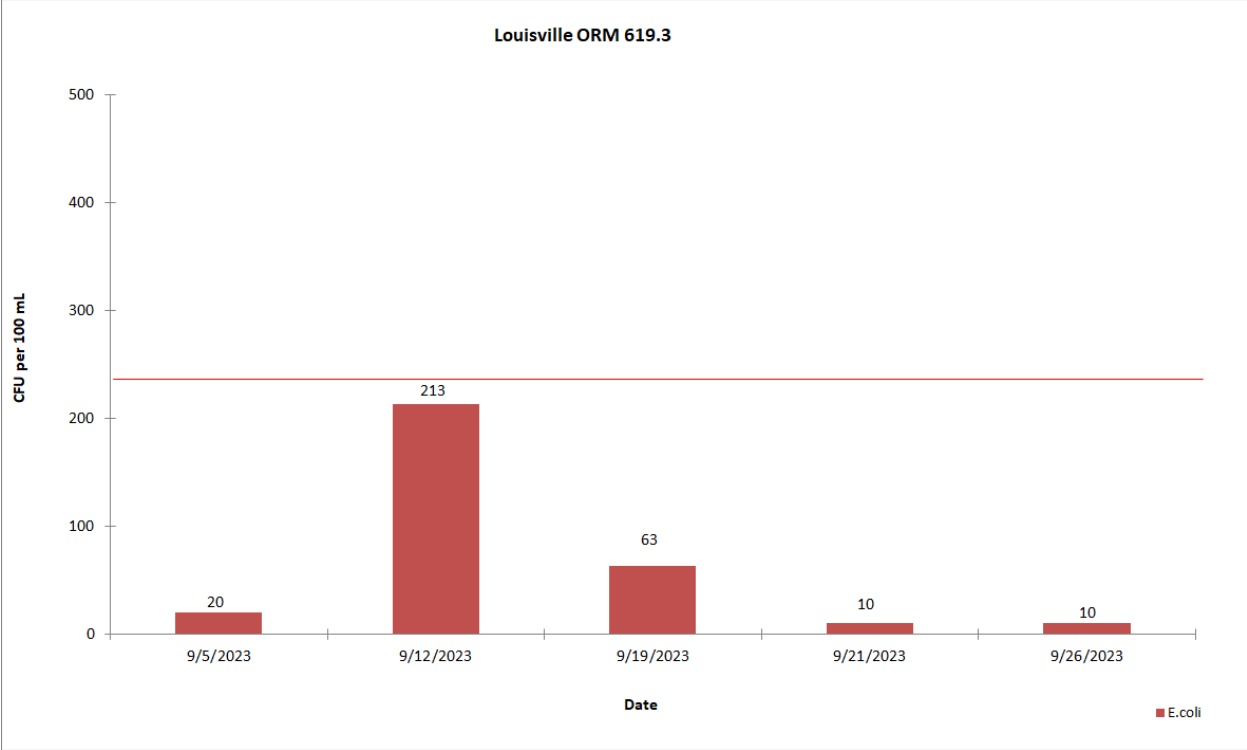




Louisville

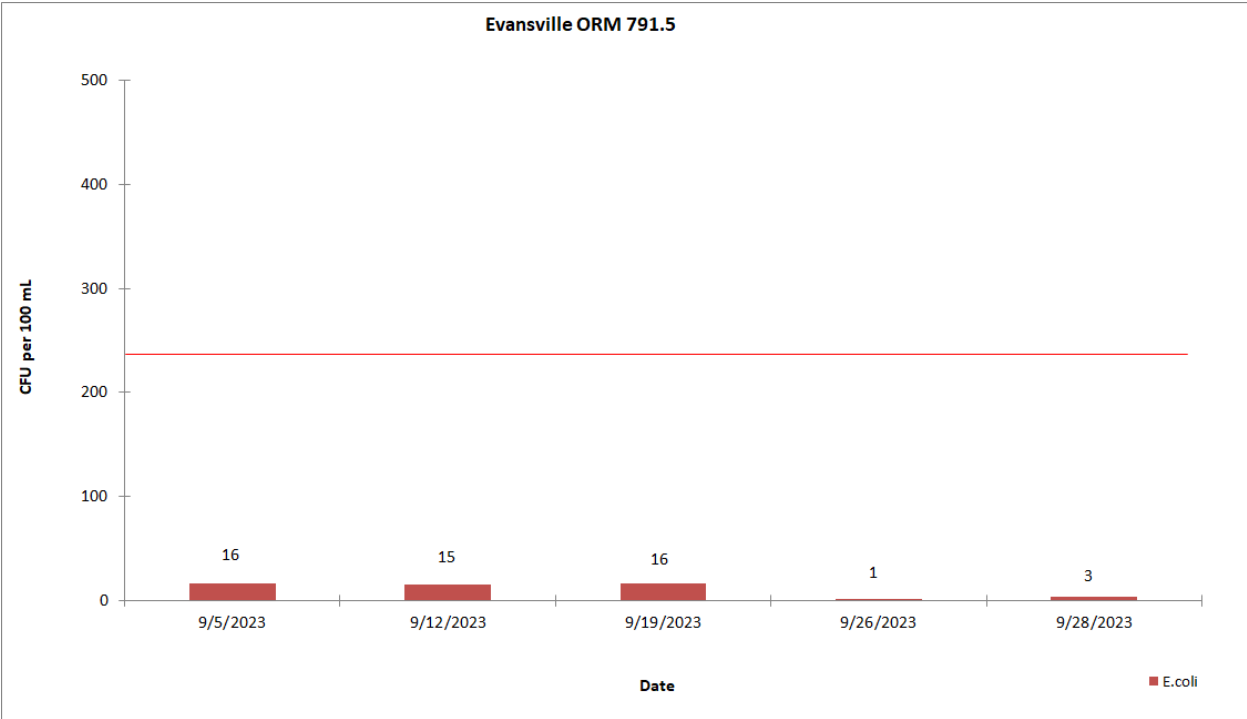
In Louisville, ORM 594.0 and ORM 619.3 did not exceed the *E.coli* criteria.

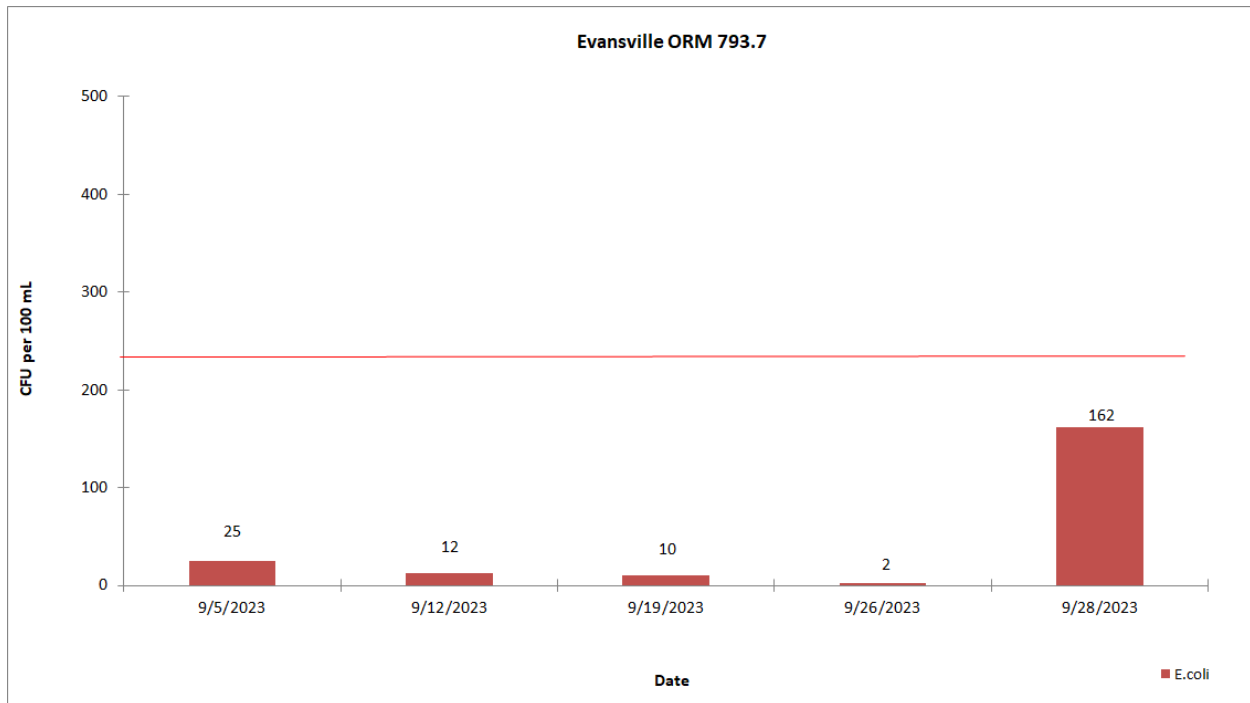




Evansville

In Evansville, ORM 791.5 and ORM 793.7 did not exceed the *E.coli* criteria.





Dissolved Oxygen and Temperature

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 September 1-15 is:
 - 87.0 °F at MP 0 to MP 341.
 - 87.0 °F at MP 341.1 to MP 606.8.
 - 87.0 °F at MP 606.9 to MP 981
- The monthly average of the daily maximum for September 16-30 is:

- 81.0 °F at MP 0 to MP 341.
- 84.7 °F at MP 341.1 to MP 606.8.
- 82.6 °F at MP 606.9 to MP 981.

Cannelton and Olmsted saw D.O. levels drop below the average of 5.0 mg/L and there were no temperature violations for the month of September.

Please click on the link below to be directed to the DO/Temperature tables for September 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 September 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.

