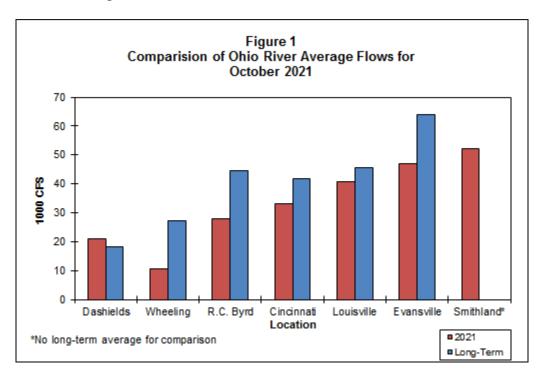
Monthly Quality Update September 2021



OHIO RIVER VALLEY WATER SANITATION COMMISSION

Flows

Average flows at seven Ohio River locations are displayed below. At each location the September 2021 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

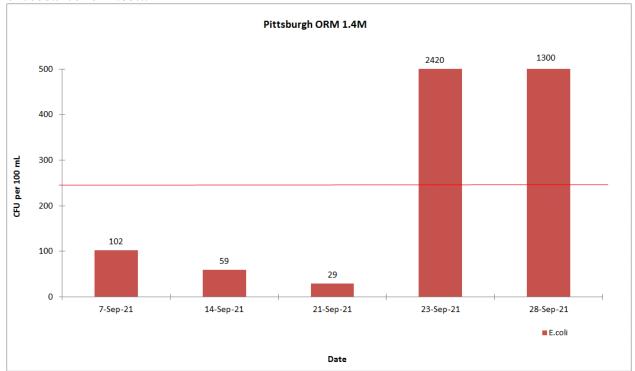
The bacteria monitoring results from five of the six Ohio River locations in September are in the attached graphs. ORSANCO's water quality criteria for the protection of human health during the contact recreation season are:

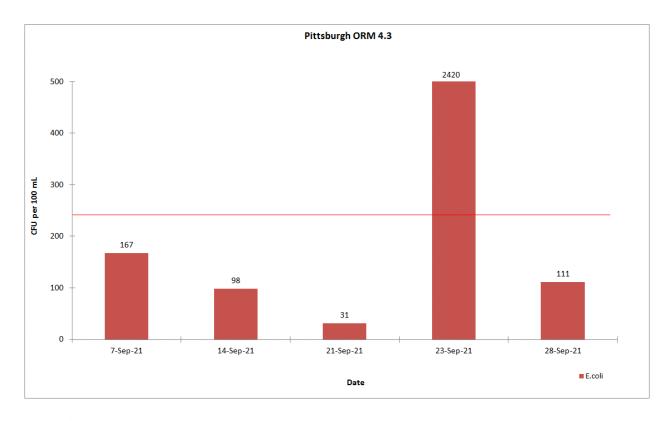
- E. coli count is not to exceed 240 CFU/100mL in more than 25 percent of samples. (E.coli is shown with a red line on the graph.)
- E. coli shall not exceed 130 CFU/100mL as a 90-day geometric mean, based on not less than five samples per month.

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

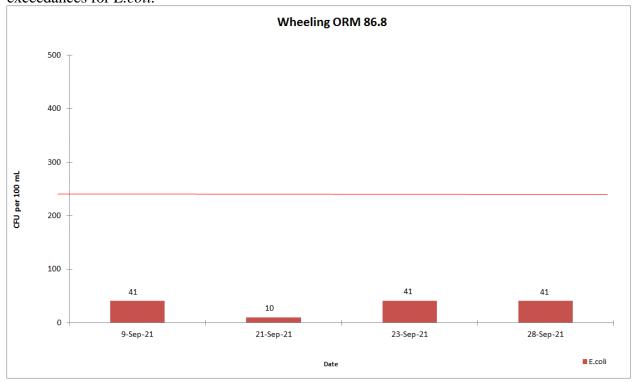
• Fecal Coliform shall not exceed 2,000/100mL as a monthly geometric mean based on not less than five samples per month.

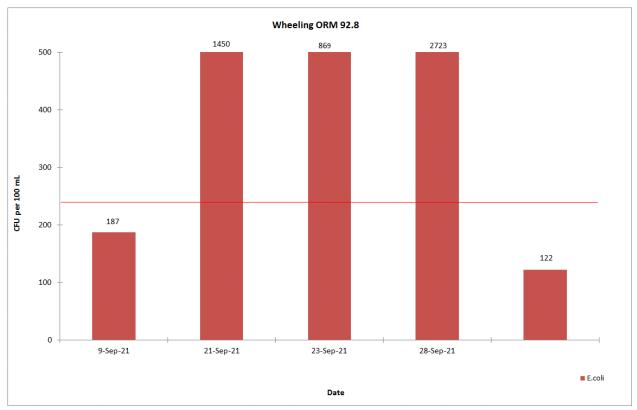
Pittsburgh In Pittsburgh, ORM 1.4 had two individual exceedances for *E.coli*. ORM 4.3 had one individual exceedance for *E.coli*.





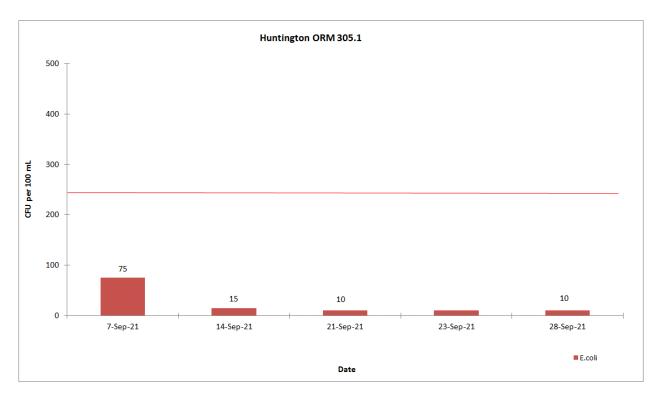
Wheeling In Wheeling, ORM 86.8 did not exceed the *E.coli* criteria. ORM 92.8 had four individual exceedances for *E.coli*.

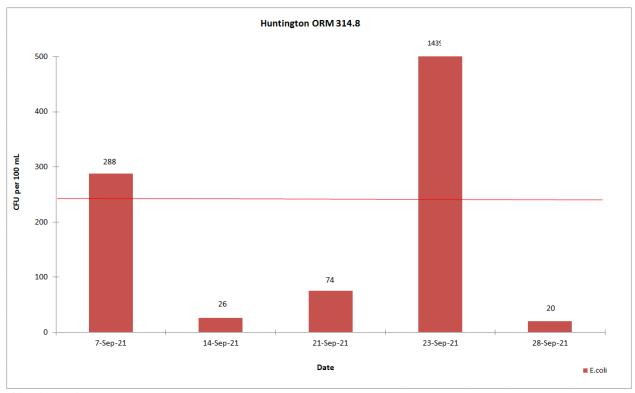




Huntington

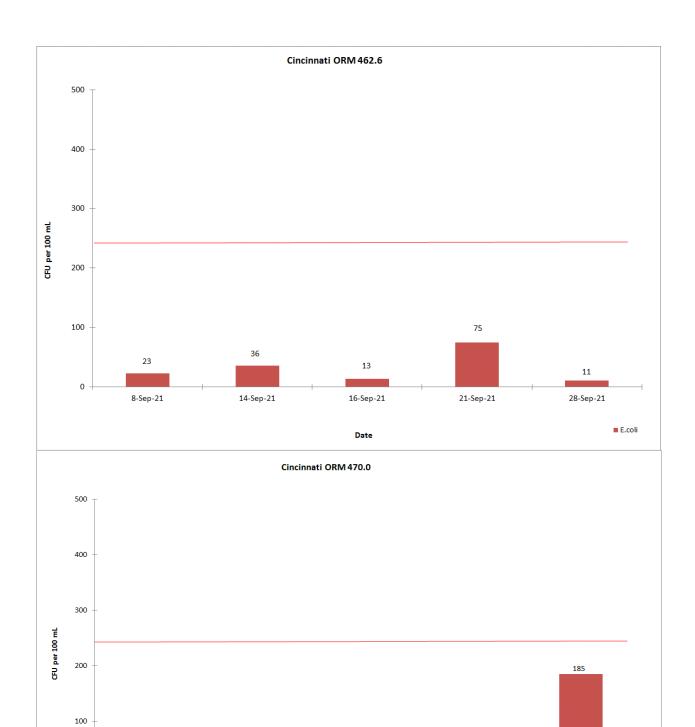
In Huntington, ORM 305.1 did not exceed the *E.coli* criteria. ORM 314.8 had two individual exceedances for *E.coli*.





Cincinnati

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



10

16-Sep-21

Date

17

14-Sep-21

14

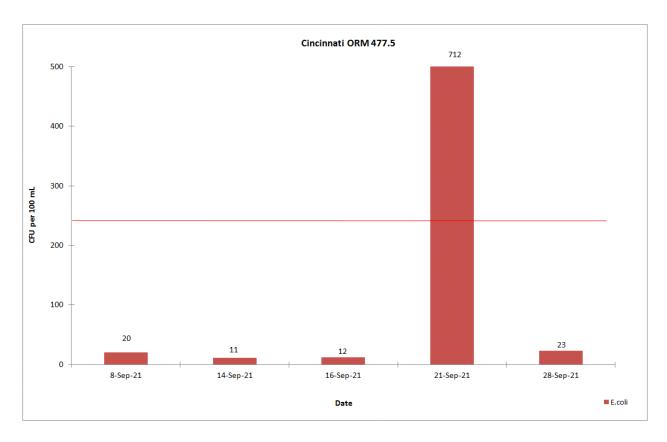
8-Sep-21

36

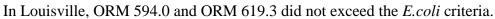
21-Sep-21

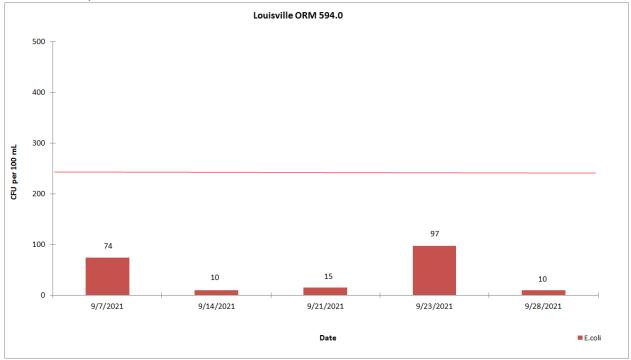
28-Sep-21

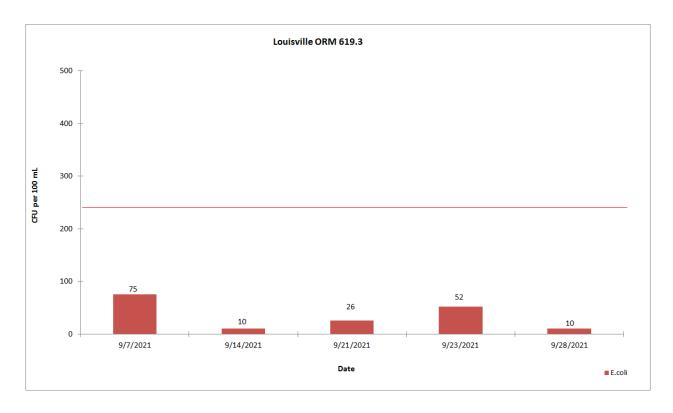
■ E.coli



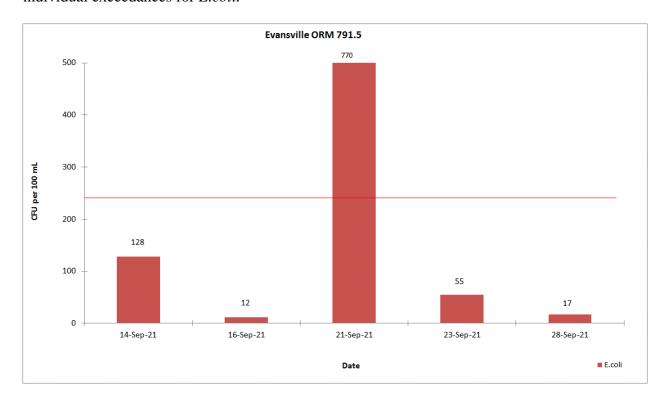
Louisville

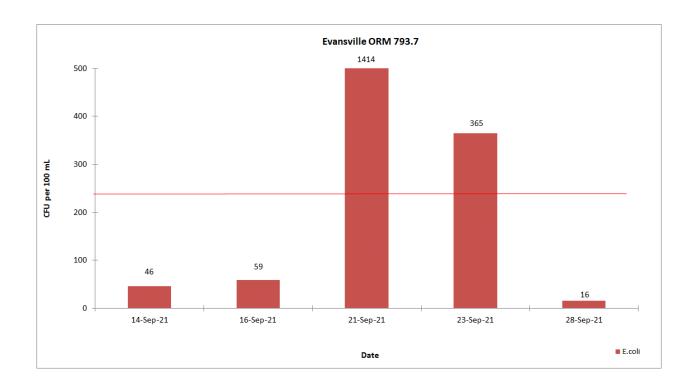






Evansville In Evansville, ORM 791.5 had one individual exceedance for *E.coli*. ORM 793.7 had two individual exceedances for *E.coli*.





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

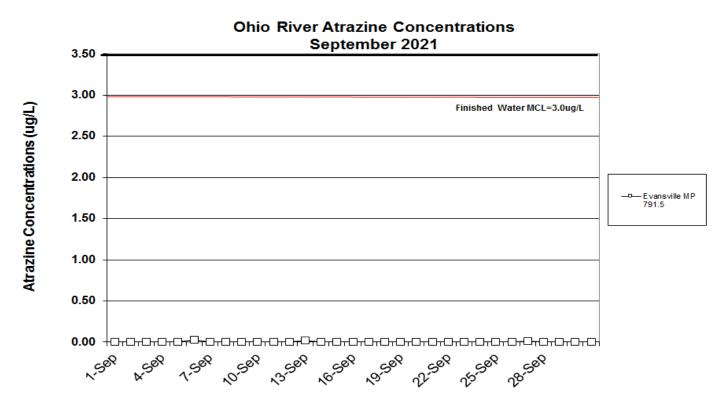
- o 81.0 °F at MP 0 to MP 341.
- o 84.7 °F at MP 341.1 to MP 606.8.
- o 82.6 °F at MP 606.9 to MP 981.

Markland (upstream) saw D.O. levels drop below the average of 5.0 mg/L on two days. 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 2021: 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 October 2021 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.



Date