# Monthly Quality Update May 2019

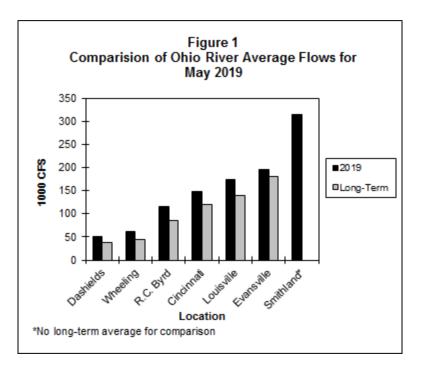


### OHIO RIVER VALLEY WATER SANITATION COMMISSION

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 May 2019 average flow (black bar) is contrasted with the long-term average monthly flow (gray bar). At all locations the May 2019 average flow was slightly above the long-term average monthly flow.

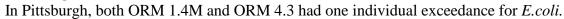


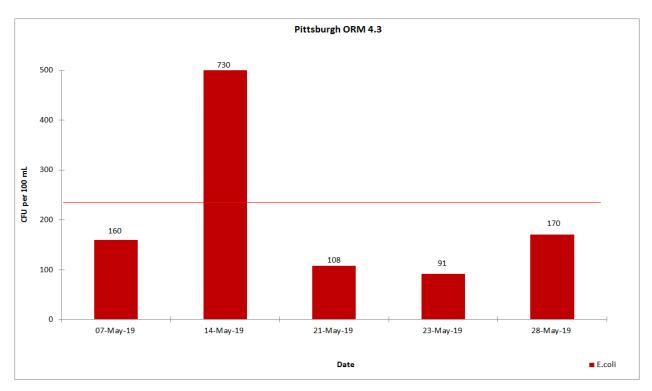
**Bacteria** 

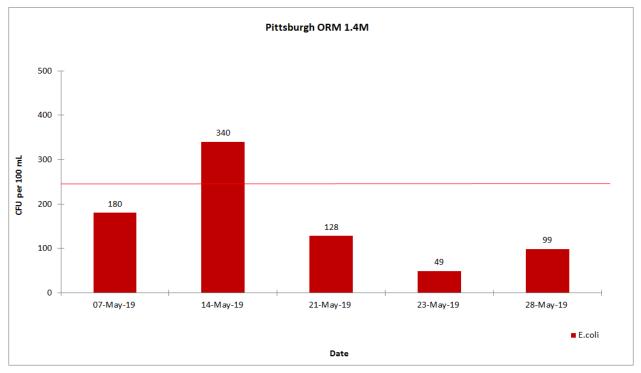
The bacteria monitoring results from six Ohio River locations in May 2019 are in the attached graphs. There are thirteen sites being sampled and West Virginia is the only state that has both Fecal Coliform and *E.coli* results. ORSANCO's water quality criteria for the protection of human health during 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.

#### Pittsburgh

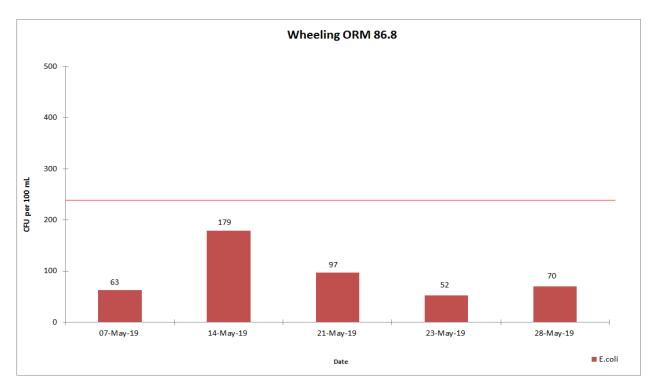


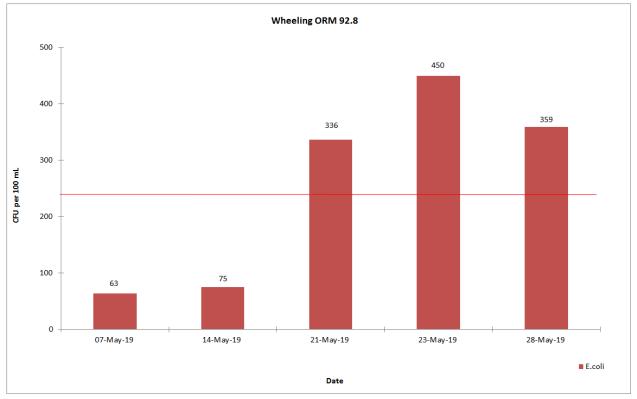




#### Wheeling

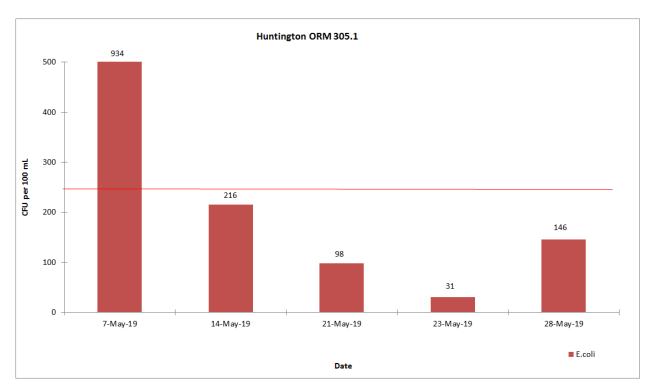
In Wheeling, ORM 86.8 no criteria violations for *E.coli*. ORM 92.8 had three individual exceedances for *E.coli*.

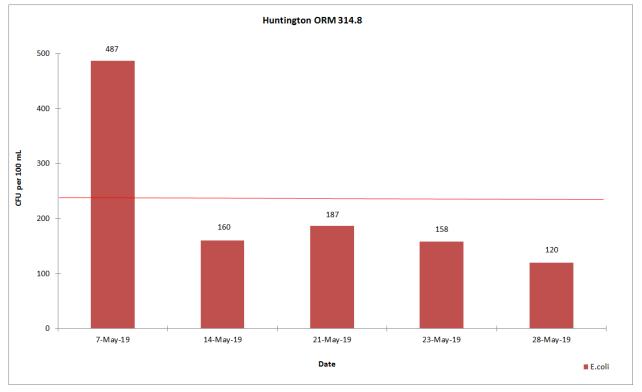




#### Huntington

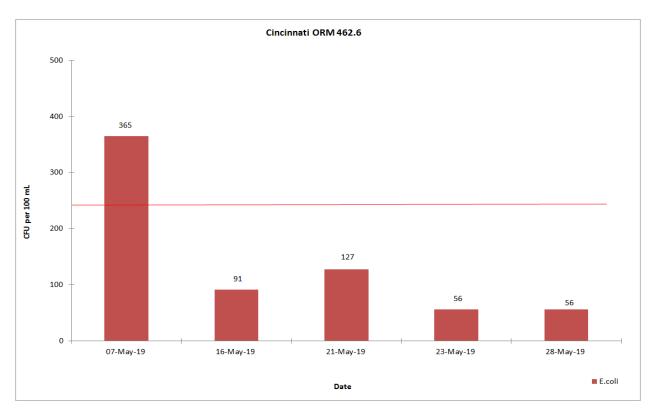
In Huntington, both ORM 305.1 and ORM 314.8 had one individual exceedance for E.coli.

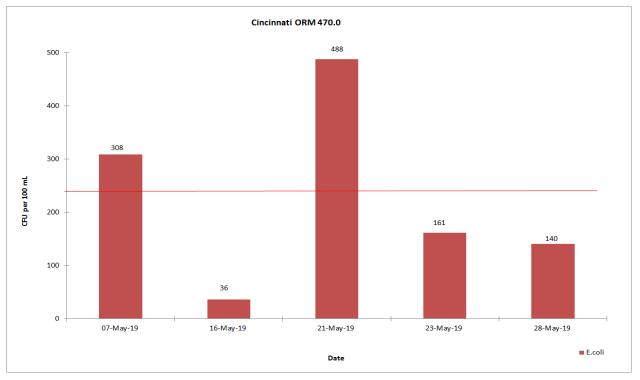


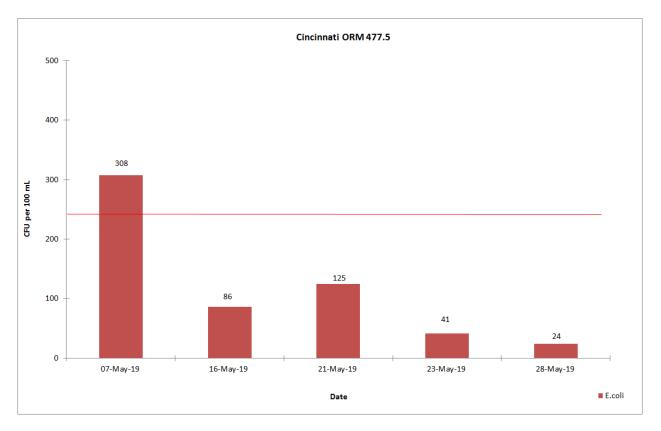


#### Cincinnati

In Cincinnati, ORM 462.6 and ORM 477.5 had one individual exceedance for *E.coli*. ORM 470.0 had two individual exceedances for *E.coli*.

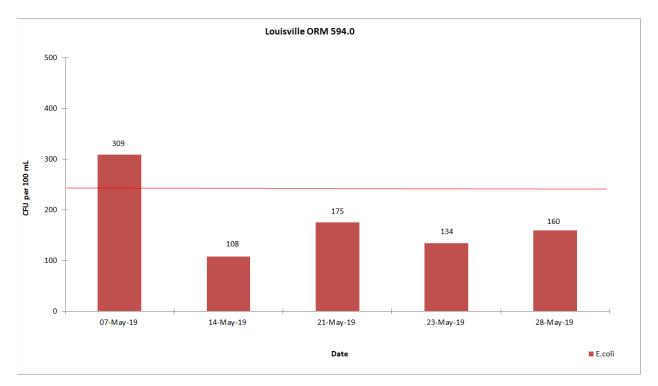


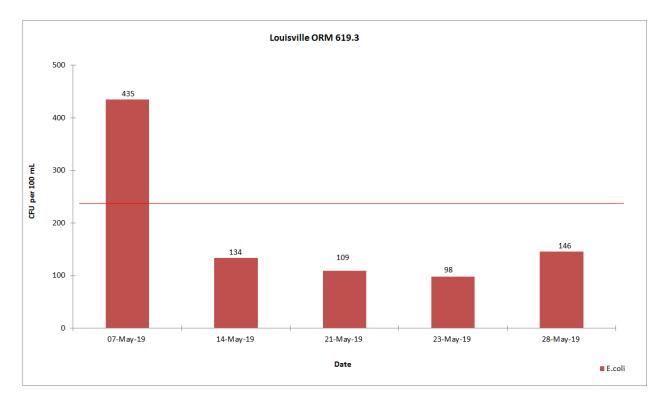




#### Louisville

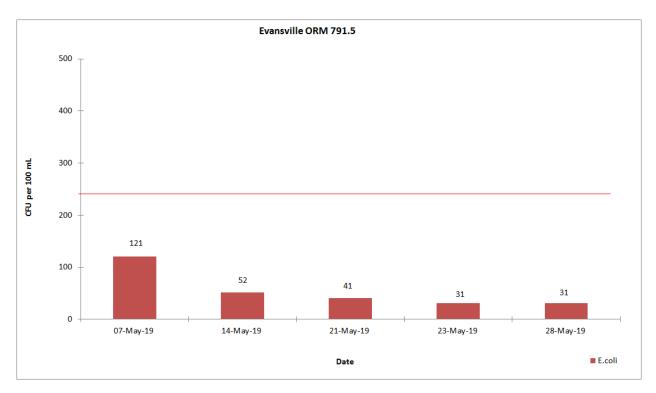
In Louisville, ORM 594.0 and ORM 619.3 both had one individual exceedance for E.coli.

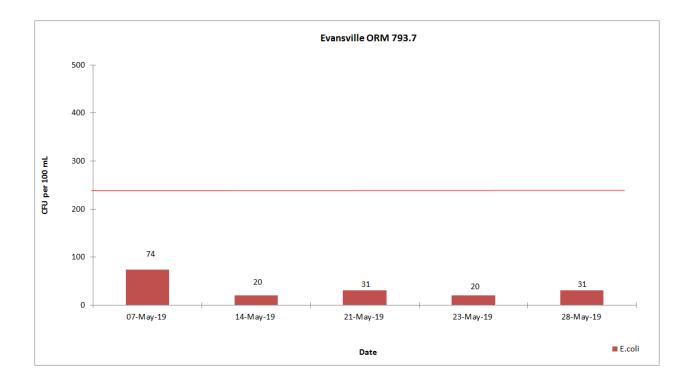




#### Evansville

In Evansville, ORM 791.5 and ORM 793.7 both had no criteria violations 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. ORSANCO's water quality criteria for the protection of warm water aquatic life habitat are:

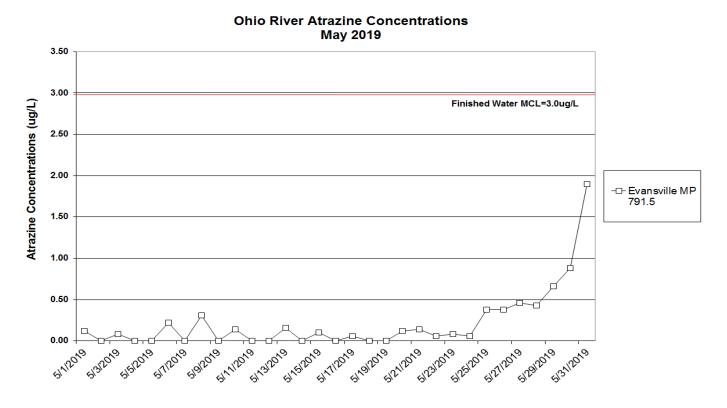
- The minimum D.O. concentration shall not be less than 4.0 mg/L at any time.
- Average D.O. concentration shall be at least 5.0 mg/L for each calendar day.
- During the April 15 June 15 spawning season, a minimum D.O. concentration of 5.0 mg/L shall be maintained at all times.
- The monthly average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

Kyger had two D.O. exceedances on May 29<sup>th</sup> and 30<sup>th</sup>. Kyger, Ironton, Greenup, Cannelton and Smithland had temperature exceedances on May 28<sup>th</sup>-May 30<sup>th</sup>.

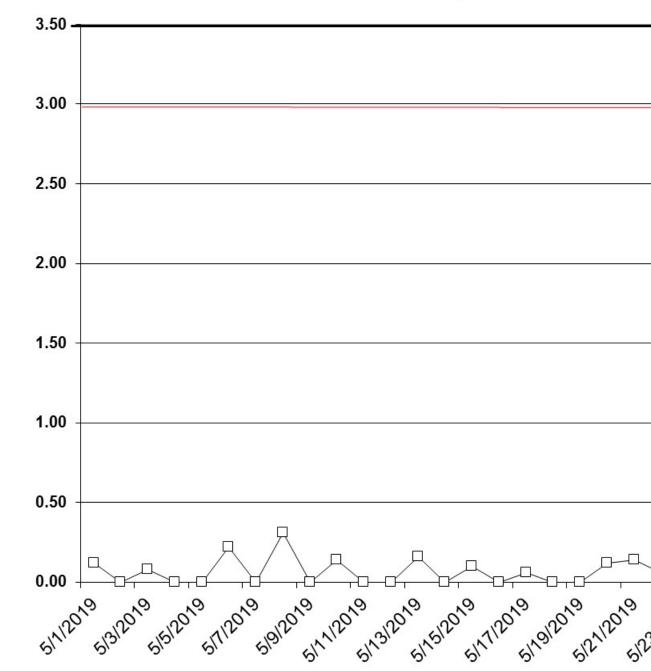
Please click on this link to be directed to the DO/Temperature tables for May 2019: <u>http://www.orsanco.org/dissolved-oxygen-and-temperature</u>

### **Atrazine**

Evansville drinking water utility samples the Ohio River at their intake and analyzes for atrazine by immunoassay technique. Results for May 2019 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.



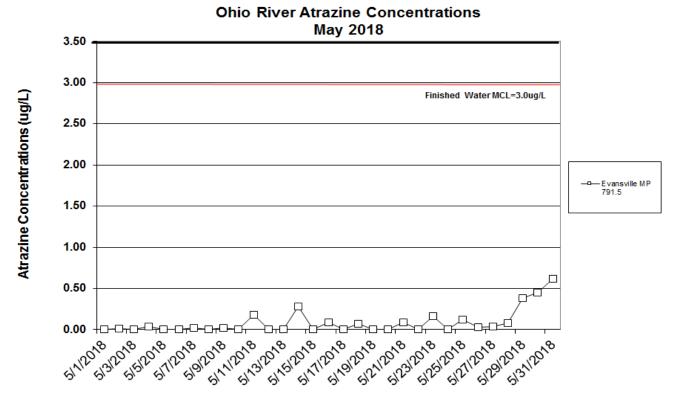
Date



### Ohio River Atrazine Concentrations May 2019

Date

Atrazine Concentrations (ug/L)



Date