Monthly Quality Update May 2020



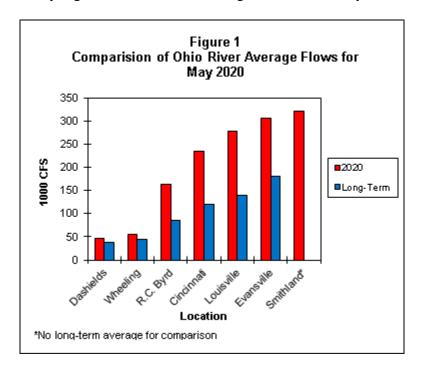
OHIO RIVER VALLEY WATER SANITATION COMMISSION

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 2020 average flow (black bar) is contrasted with the long-term average monthly flow (gray bar). Flows were significantly higher at all locations during the month of May.



<u>Bacteria</u>

The bacteria monitoring results from four of the six Ohio River locations in May are in the attached graphs. Due to the current Covid-19 pandemic, Pittsburgh and Wheeling are unable to sample. ORSANCO's water quality criteria for the protection of human health during the contact recreation season are:

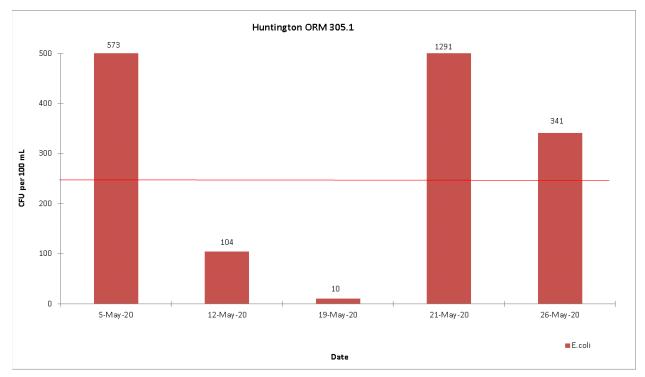
- *E. coli* count is not to exceed 240 CFU/100mL in more than 25 percent of samples. (*E.coli* is shown with a red line on the graph.)
- *E. coli* shall not exceed 130 CFU/100mL as a 90-day geometric mean, based on not less than five samples per month.

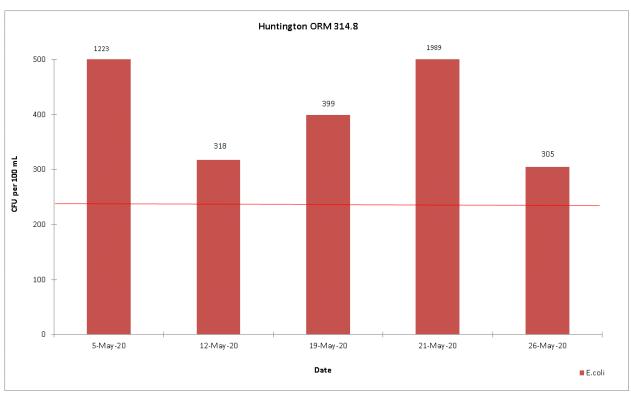
ORSANCO's water quality criteria for the protection of public water supply year round are:

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

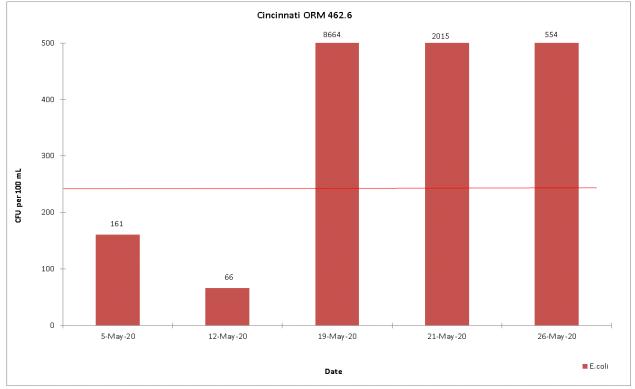
Huntington

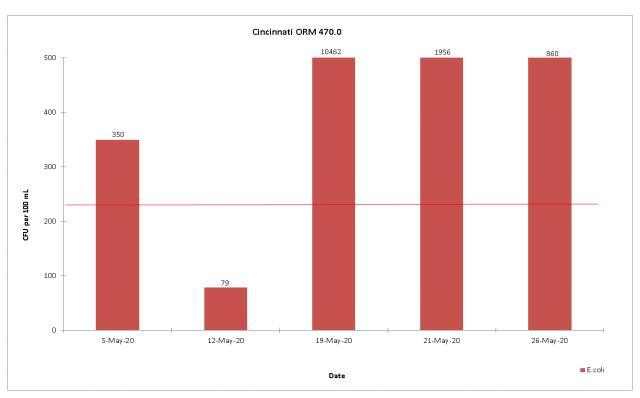
In Huntington, ORM 305.1 had three individual exceedances for *E.coli*. ORM 314.8 had five individual exceedances for *E.coli*.

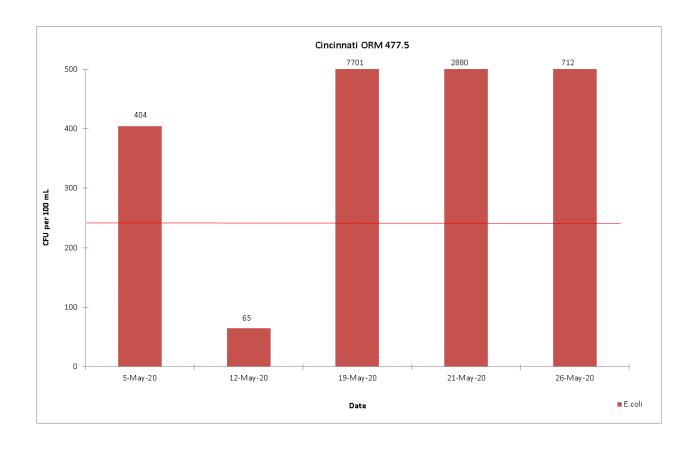




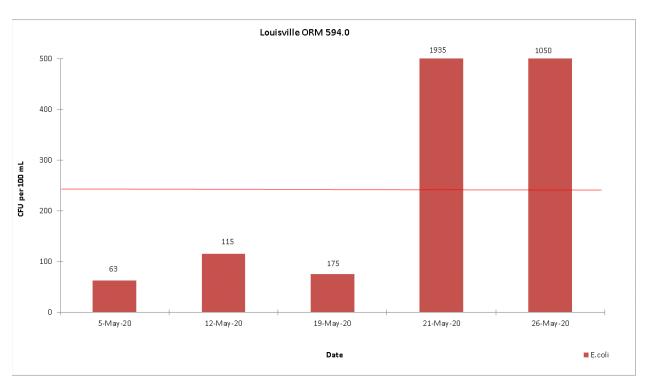
Cincinnati In Cincinnati, ORM 462.6 had three individual exceedances for *E.coli*. ORM 470.0 and ORM 477.5 had four individual exceedances for *E.coli*.

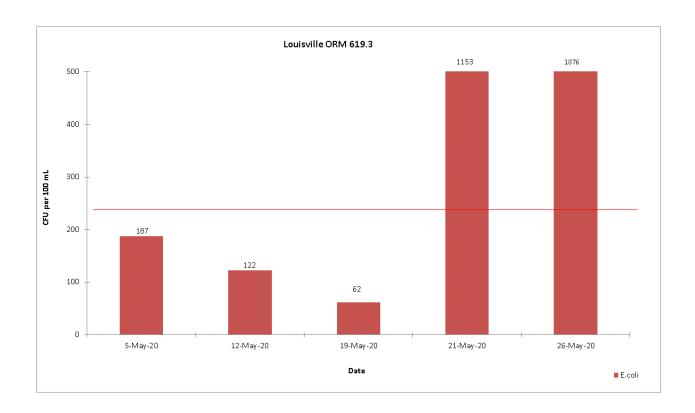




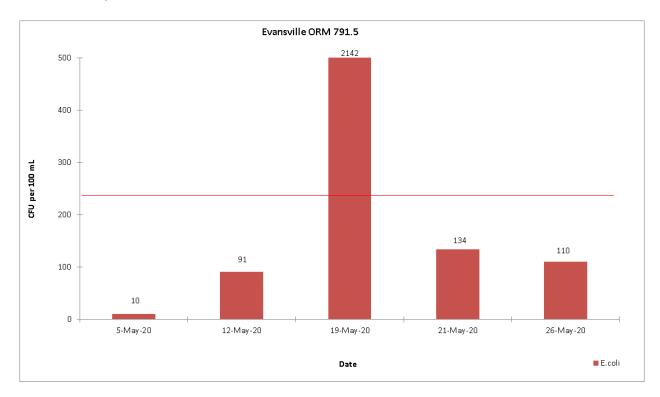


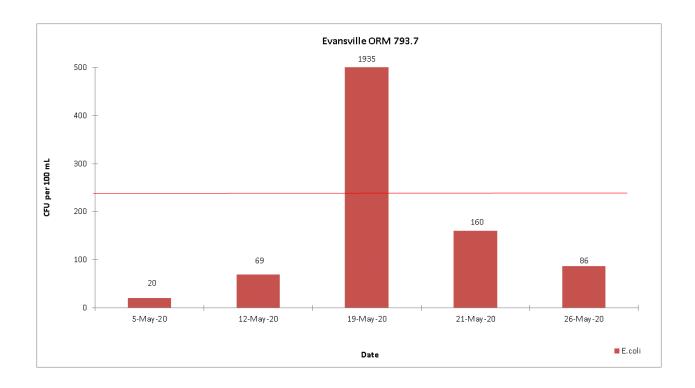
Louisville In Louisville, ORM 594.0 and ORM 619.3 both had two individual exceedances for *E.coli*.





Evansville In Evansville, ORM 791.5 and ORM 793.7 both had one individual exceedance for *E.coli*.





Dissolved Oxygen and Temperature

A summary of the dissolved oxygen and temperature readings collected in September 2020 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:
 - 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.

There were some issues with instrumentation at some of the sites during the month of May and no valid data was available. There were no temperature violations for the month of May.

Please click on the link below to be directed to the DO/Temperature tables for May 2020: 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 2020 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.

