

**Portsmouth, NH Peirce Island Wastewater Treatment Facility  
SARS-CoV-2 Biomarker Results Summary**

Report Date: July 28, 2022; Sampled by: Kathy Sanborn, July 26, 2022  
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**Dates Sampled for this Monitoring Period:**

Tuesday, July 26, 2022*
Tuesday, July 19, 2022
Tuesday, July 12, 2022
Tuesday, July 5, 2022
Tuesday, June 28, 2022
Tuesday, June 21, 2022

\*New samples since last report

**Method:** A 24-hour flow weighted composite sample was taken from July 25-26, 2022. This sample was preprocessed and extracted using a solids separation, Ceres Nanoscience viral concentration, and Kingfisher extraction approach. Two viral markers (N1 and N2) were quantified via Bio-Rad QX200 ddPCR.

**Results:** Both the SARS-CoV-2 N1 and N2 viral biomarkers were detected in the composite sample taken July 25-26, 2022. Biomarkers decreased 4-fold over the previous sample, which is suggestive of decreasing SARS-COV-2 viral presence within the community served by the treatment facility.

**Table 1:** Sample date and biomarker results. "BDL" represents values below the quantified limits of instrument detection of 172 copies/100 mL wastewater.

Sample Date	SARS-CoV-2 Biomarkers	
	N1 copies/100mL	N2 copies/100mL
07/26/2022*	348	450
07/19/2022	1,395	1,715
07/12/2022	1,465	1,555
07/05/2022	668	896
06/28/2022	2,572	2,712
06/21/2022	523	644

\*New samples since last report

For more detailed information regarding local, county, and statewide COVID-19 infections, please refer to the data reported through the New Hampshire Division of Health and Human Services website <https://www.covid19.nh.gov/dashboard>.

Since June 6, 2022, the minimum values for SARS-CoV-2 measured in New Hampshire were below analytical detection limits (BDL) while the maximum reported N1 and N2 values across 12 reporting facilities have been 4,651 and 4,939 copies/100 ml wastewater, respectively. For the week of July 25, the maximum values measured at five reporting facilities are 1,102 and 1,320 copies/100 ml wastewater for N1 and N2, respectively.

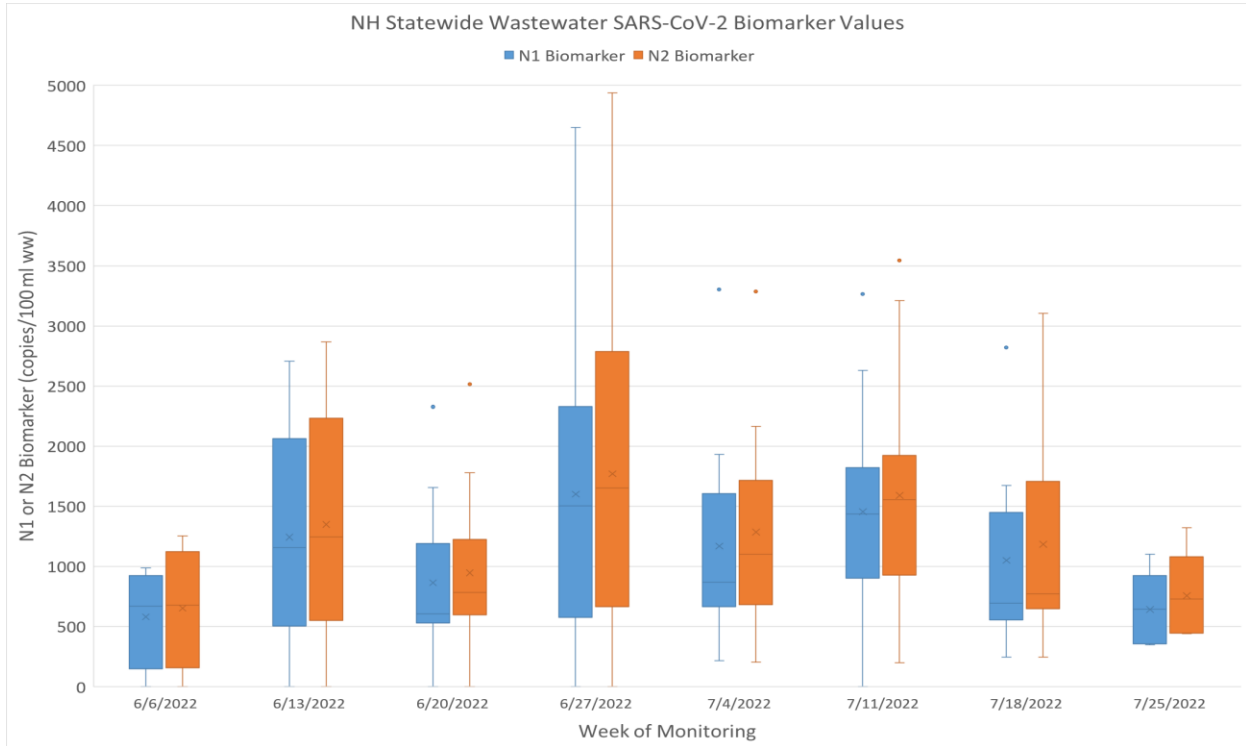


Figure 1. Range of SARS-CoV-2 biomarker values measured at up to 13 wastewater facilities since the NH wastewater surveillance program began in early June 2022.