

## Case count vs N2 conc

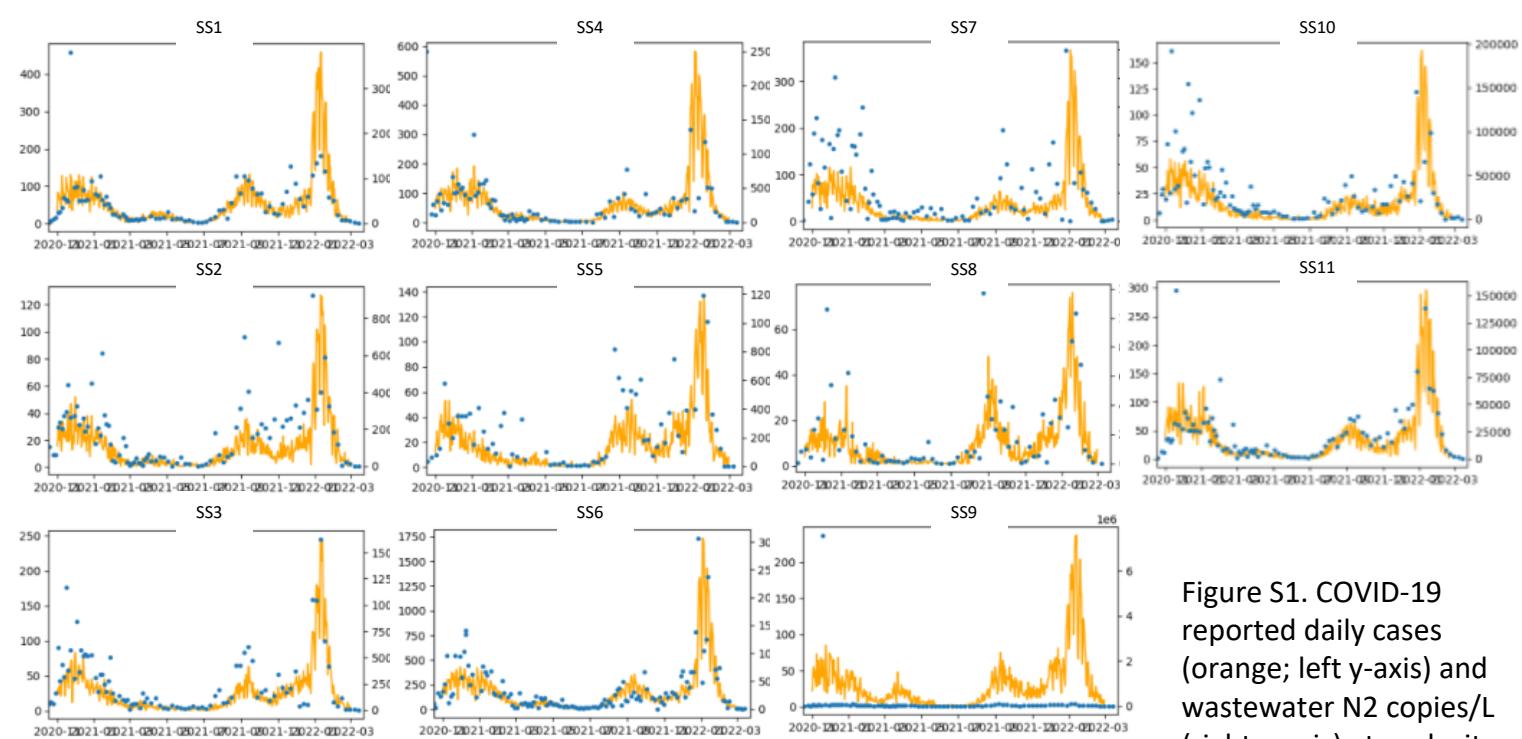


Figure S1. COVID-19 reported daily cases (orange; left y-axis) and wastewater N2 copies/L (right y-axis) at each site.

## Case count vs flow-adjusted N2 load (copies/day)

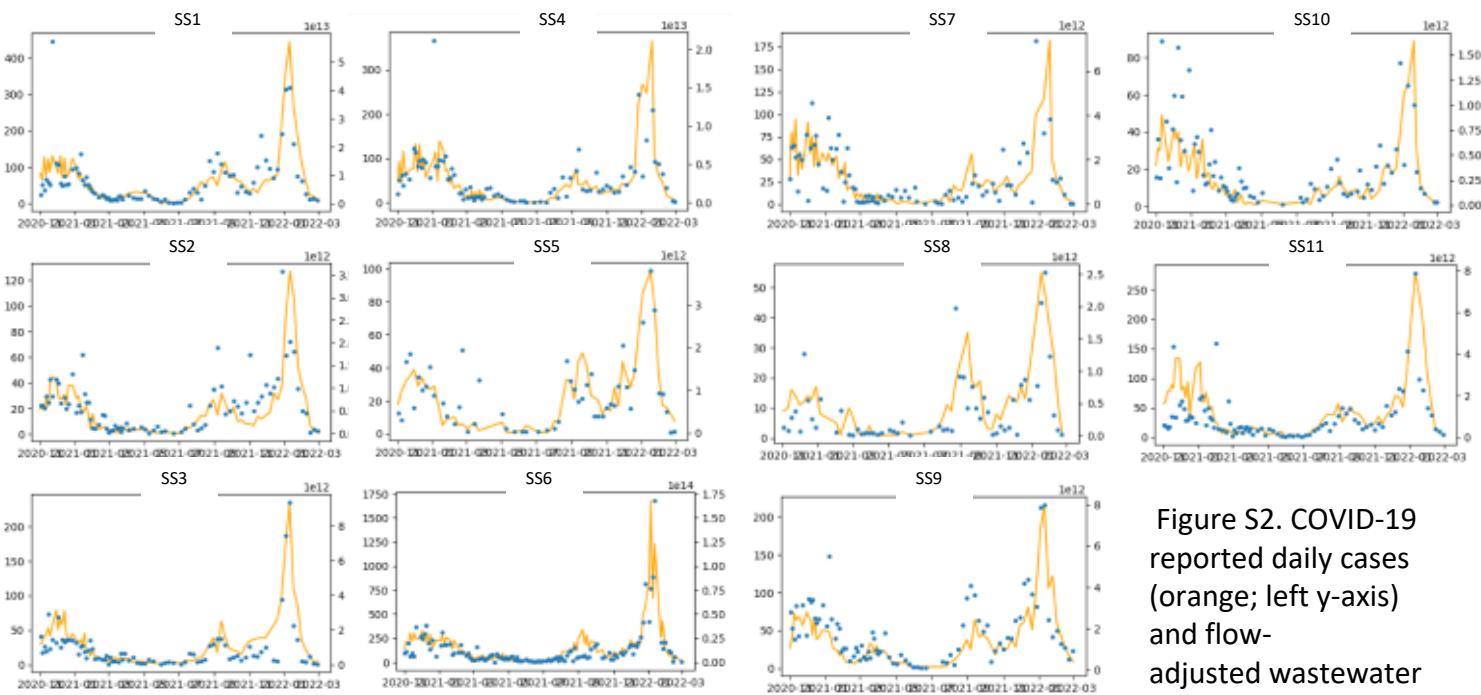


Figure S2. COVID-19 reported daily cases (orange; left y-axis) and flow-adjusted wastewater N2 copies/day (right y-axis) at each site.

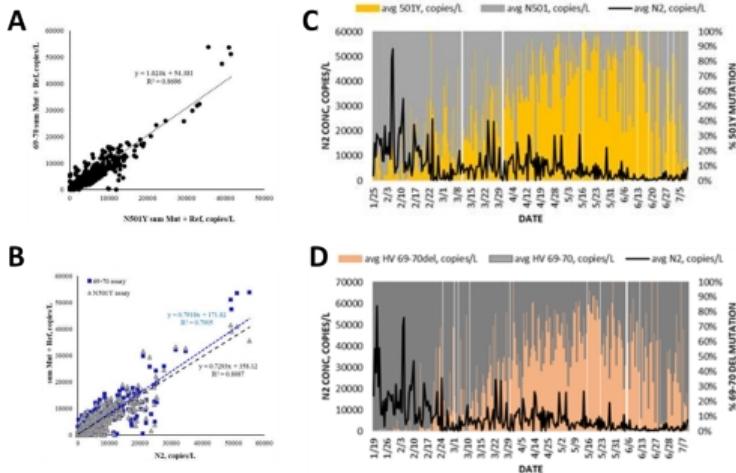


Figure S3. Performance of the ddPCR mutation assays A) relationship of the SARS-CoV-2 concentrations measured in wastewater using the 2 mutation assays; B) relationship of the SARS-CoV-2 concentration measured in wastewater with the mutation assays and the N2 assay; C) concentration of SARS-CoV-2 N2 gene fragments measured in wastewater (all sites plotted together) and proportion of them that contained the N501Y substitution; D) concentration of SARS-CoV-2 N2 gene fragments measured in wastewater and proportion with the 69/70 deletion.

## Case count vs shedding rate (cp/g feces)

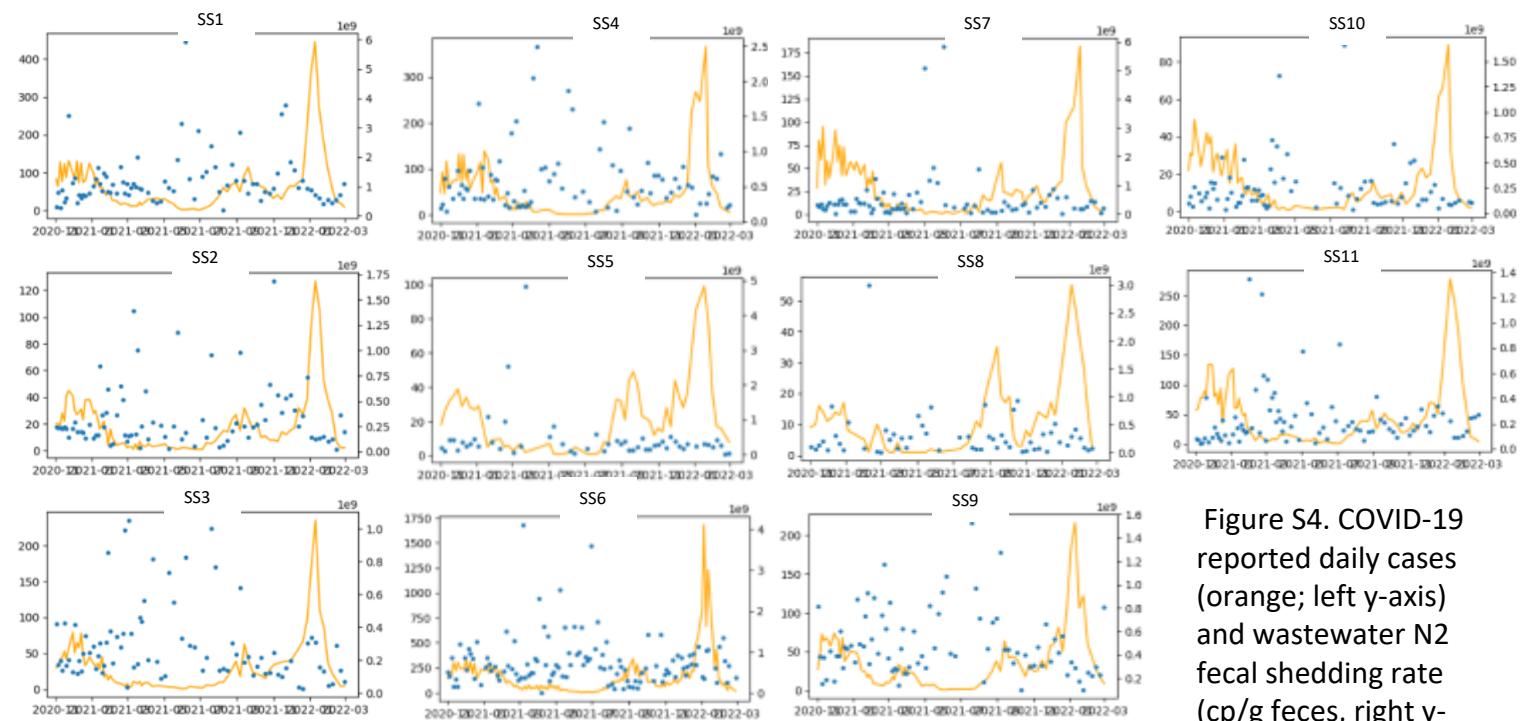
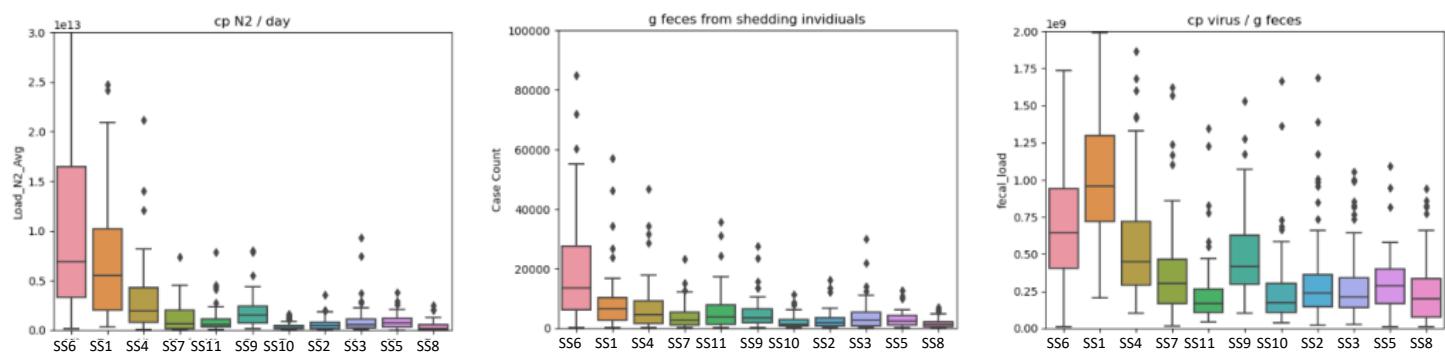


Figure S4. COVID-19 reported daily cases (orange; left y-axis) and wastewater N2 fecal shedding rate (cp/g feces, right y-axis) at each site.



**Figure S5. Estimated SARS-CoV-2 shedding in sewersheds. A). copies of N2 per day, B). Gram of feces shed per day and C). Copies of SARS-CoV-2 per gram of feces**