

**Supplementary Table 1.** Cell counts for potentially toxigenic cyanobacteria as reported by the Virginia Department of Health (VDH) for 2019 and 2020 at Lake Anna, VA. Sample collection sites are indicated on the VDH HAB map (<https://www.vdh.virginia.gov/waterborne-hazards-control/algal-bloom-surveillance-map/>). The Virginia Department of Environmental Quality (DEQ) collected the samples from Lake Anna, and cyanobacteria counts were performed at the Phytoplankton Lab at Old Dominion University (ODU).

<b>Genus</b>	<b>Reported Cell Counts, 2019</b>	<b>Reported Cell Counts, 2020</b>
<i>Anabaena</i>	12,528	23,380
<i>Anabaenopsis</i>	4,576	29,050
<i>Aphanizomenon</i>	193,840	151,270
<i>Arthrospira</i>	37,669	0
<i>Chrysoosporum</i>	505,813	262,080
<i>Cuspidothrix</i>	1,323,760	46,920
<i>Dolichospermum</i>	122,692	53,490
<i>Jaaginema</i>	7,137,168	14,000
<i>Limnothrix</i>	1,520	21,140
<i>Microcystis</i>	34,267	1,230
<i>Nostocalean</i>	0	16,170
<i>Phormidium</i>	105,112	0
<i>Planktolyngbya</i>	979,394	270,200
<i>Planktothrix</i>	0	13,300
<i>Pseudanabaena</i>	4,747,513	805,051
<i>Raphidiopsis</i>	8,449,792	2,339,584
<i>Sphaerospermopsis</i>	0	2,350