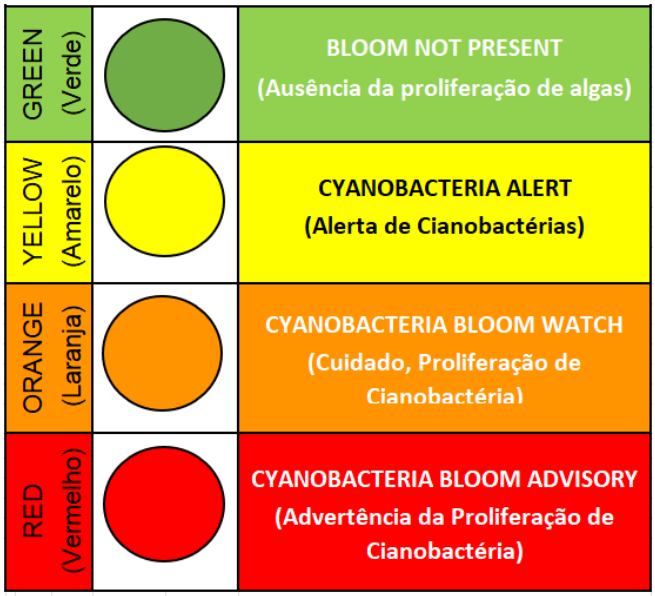
MV CYANO 2024 data for Watcha Pond

Samples collected and analyzed by great Pond Foundation using a bbe Moldaenke Fluoroprobe II. For more information, please see www.greatpondfoundation.org/mvcyano/



MV CYANO data are generated from a bbe Moldaenke Fluoroprobe instrument. This instrument is a fluorometer, which measures the biomass (quantity) of microscopic plants by detecting the fluorescence produced in response to different wavelengths of light. The amount of fluorescence is directly related to the concentration of plant pigments in the sample. Different types of microscopic aquatic plants, called phytoplankton, utilize different pigments, which allows the fluorometer to differentiate and quantify different phytoplankton taxa. The Fluoroprobe measures the concentration of cyanobacteria in micrograms per liter (µg/L) and estimates the number of cells per milliliter (cells/mL). The MV CYANO color designations are based on the µg/L measurement. The total amount of plant pigments in the water sample corresponds to the amount of chlorophyll, measured in µg/L. The concentration of chlorophyll is a measurement of the phytoplankton biomass in the sample. Salinity and water temperature, measured at the time of sample collection, are factors that can influence the growth rate of cyanobacteria and other types of phytoplankton. The MV CYANO color determination (see color-chart above) corresponds to the risk level determined by the local Board of Health agencies based on the concentration of cyanobacteria and other environmental factors. The MV CYANO risk matrix is reviewed annually and updated as needed in order to stay current with health standards and scientific studies.

Station	Pond	Date	Cyanobacteria (ug/L)	Cyanobacteria (cells/mL)	Chlorophyll (ug/L)	Temp (°C)	Temp (°F)	Salinity (ppt)	MV CYANO
WCH01	WCH	6/17/2024	3.73	3729.50	24.91	22.60	72.68	2.40	yellow
WCH02	WCH	6/17/2024	4.84	4839.90	40.96	24.00	75.20	3.30	yellow
WCH03	WCH	6/17/2024	6.08	6075.50	47.72	24.00	75.20	3.04	yellow
WCH04	WCH	6/17/2024	4.66	4662.10	41.04	23.90	75.02	3.33	yellow
WCH05	WCH	6/17/2024	4.49	4491.30	40.57	24.10	75.38	3.34	yellow
WCH06	WCH	6/17/2024	4.98	4976.20	43.14	23.50	74.30	3.34	yellow
WCH01	WCH	8/28/2024	2.57	2573.10	6.23	23.70	74.66	1.35	yellow

WCH01A (material)	WCH	8/28/2024	3.64	3641.80	13.29	23.70	74.66	1.35	yellow
WCH02	WCH	8/28/2024	2.90	2898.20	6.03	25.40	77.72	2.26	yellow
WCH03	WCH	8/28/2024	2.66	2655.90	8.61	24.80	76.64	1.90	yellow
WCH04	WCH	8/28/2024	2.32	2318.00	5.33	25.10	77.18	2.30	yellow
WCH05	WCH	8/28/2024	2.30	2300.00	5.75	24.60	76.28	2.32	yellow
WCH06	WCH	8/28/2024	2.41	2404.60	7.39	24.80	76.64	2.32	yellow
WCH01	WCH	9/10/2024	0.70	703.90	2.26	19.7	67.46	1.62	yellow
WCH02	WCH	9/10/2024	1.68	1682.30	6.90	21.4	70.52	2.05	yellow
WCH03	WCH	9/10/2024	1.37	1367.40	8.73	20.6	69.08	1.95	yellow
WCH04	WCH	9/10/2024	1.85	1845.70	5.03	21.5	70.70	2.24	yellow
WCH05	WCH	9/10/2024	2.22	2212.90	6.80	20.8	69.44	2.27	yellow
WCH06	WCH	9/10/2024	2.16	2159.80	6.71	21.4	70.52	2.26	yellow
WCH01	WCH	10/1/2024	1.74	1740.30	9.61	17.60	63.68	1.52	yellow
WCH02	WCH	10/1/2024	1.58	1580.30	10.56	18.80	65.84	1.86	yellow
WCH03	WCH	10/1/2024	1.58	1584.20	9.08	18.70	65.66	1.72	yellow
WCH04	WCH	10/1/2024	1.63	1627.90	10.31	18.80	65.84	1.90	yellow
WCH05	WCH	10/1/2024	1.73	1727.10	9.66	18.70	65.66	1.90	yellow
WCH06	WCH	10/1/2024	1.68	1674.80	9.00	18.90	66.02	1.89	yellow