

Lake Massapoag Nutrient Levels for Inflows 2022 and Comparison Data

INFLOWS TO LAKE MASSAPOAG: Phosphorus, E. Coli, Nutrients

	rain event post 2-day rain							Phosp
Phosphorus (mg/L)	5/23/2022	6/27/2022	7/25/2022	8/22/2022	9/7/2022	9/26/2022	10/31/2022	% high
Lagoon Inflow	0.350	0.024	0.038	1.150	0.229	0.019	0.021	43%
Canoe River	0.049	0.110	0.400		0.050	0.040	0.024	50%
Fletcher's Cove	0.022	0.010	0.019	0.010	0.027	0.015	0.010	0%
140 East Foxboro	0.133	0.132		0.607	0.131	0.123	0.044	83%
Opp 123 Beach St	0.726	0.157			0.049	0.026	0.035	40%
Wetland/SHS	0.545				0.066	0.069	0.061	100%
Sucker Brook	0.019	0.021	0.032	0.141	0.030	0.012	0.015	14%
Longmeadow	0.032			0.689			0.016	33%
Landfill Drain S	0.021	0.019	0.035		0.032	0.043	0.038	0%
Landfill Drain N	0.021				0.016	0.035	0.010	0%
285 Massapoag Ave					0.041	0.089		50%

Source: Town of Sharon Lake Committee, G&L Labs, sampling by Conservation Department
8/22 rain event sample inside lagoon, no flow, sample murky

See Hot Spot tab

	rain event post 2-day rain Sucker Br only							Total Nitrogen	E coli
E. coli (cfu/100 ml)		6/27/2022	7/25/2022	8/22/2022	9/7/2022	10/6/2022	10/31/2022	% high	
Lagoon Inflow		10	40	1700	4100		0.65	50%	
Canoe River		710	28		2300		1.62	67%	
Fletcher's Cove		45	12	90	20			0%	
140 East Foxboro		<10		2800	760		1.75	67%	
Opp 123 Beach St		<10			360			50%	
Wetland/SHS					1900		2.18	100%	
Sucker Brook		410	260	>8000	6100	1733	0.81	100%	
Longmeadow				340				100%	
Landfill Drain S		<10	<5		640			33%	
Landfill Drain N					280			100%	
285 Massapoag Ave					760			100%	

Source: Town of Sharon Board of Health, G&L Labs, sampling by Conservation Department
8/22 rain event sample inside lagoon, no flow, sample murky

See Hot Spot tab

Sucker Brook		post-rain							E/P
Addl. Indicators	5/12/2022	6/9/2022	7/14/2022	8/11/2022	9/8/2022	10/6/2022	10/13/2022	% high	
E. coli	< 10	717	933	187	3870	1733	74	67%	
Total Phosphorus	0.0495	0.0456	0.0571	0.012	0.0354	0.078	0.079	50%	
PO4-P*orthophosphate	0.00747	(holding time)	(holding time)		(holding time)	NA	(holding time)		
Total Nitrogen*	0.747	exceed 180%)	exceed 117%)		exceed 146%)	NA	exceed 125%)		
NH3-N* (N, ammonia)	0.0518					NA			
Chlorophyll a	0.683	0.424	1.03	0.477	0.19	NA	1.070		
Phaeophytin	0.829	1.04	1.51	0.899	0.29	NA	1.230		

Source: Neponset River Watershed Association, Community Watershed Monitoring Network (CWMN)

Hot Spot Survey 10/6/22:

* Collected once over six months, site rotates

*High E. coli at 10/12 sites

Key: E. coli > 235 cfu/100 ml.

*High P at 2/12 sites

Phosphorus > .05 mg/l (inflow)

See Hot Spot Tab

Chlorophyll a: Oligotrophic = <2, Mesotrophic = 2-5, Eutrophic = 6-40.