

WARWICK TOWNSHIP WELLHEAD PROTECTION PROGRAM

HISTORY OF NITRATE LEVELS COMPARED TO RAINFALL

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Rainfall	42.64	24.94	46.81	50.87	50.83	46.22	45.68	36.6	41.77	39.25	35.47	55.07	39.48
Raw Water Nitrate Levels	14	13.9	13.4	12.6	14	14.7	13.5	13.1	12.8	10.3	11.7	11.5	10.8
Soil Nitrate Levels - Balmer Farm				24.75	56.98	38.13	82.92	54.78	35.85	28.6	65.88	28.25	44.6
Well Levels	42.7	39.8	35.6	47.6	46.1	46.7	46	43.8	43.6	42.8	44.1	48	49.8

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Rainfall	49.09	70.09	64.18	33.69	34.16	69.92	46.52	46.00					
Raw Water Nitrate Levels	11.3	10.2	8.65	8.8	10.5*	13.2	14.1	13.6					
Soil Nitrate Levels (ave. ppm) - Balmer Farm	19.59	25.58	31.38	56.53	57.63	26.5	7.75	16.75					
Soil Nitrate Levels (ave. ppm) - Reiff Farm				38.17	117.23	32.88	8.75	39.8					
Soil Nitrate Levels (ave. ppm) - Bollinger Farm						16.4	6.75	49.4					
Well 1 Level Ave. (ft. above level transducer)	50.8	53.1	49.5	51.6	50.1	55.4	55.0	51.6					
Well 1 Min. Monthly Ave. (ft. above level transducer)					44.0	48.2	48.9	47.8					
Well 1 Max. Monthly Ave. (ft. above level transducer)					55.2	63.4	62.0	55.8					
Well 2 Level (ft. above level transducer)				72.6	67.8	77.3	67.3	70.1					
Well 2 Min. Monthly Ave. (ft. above level transducer)					45.1	46.5	63.3	56.6					
Well 2 Max. Monthly Ave. (ft. above level transducer)					78.2	88.1	94.2**	76.4					

* A new lab procedure for measuring nitrates was implemented on 7/13/17 to improve accuracy.

** This value may be incorrect due to level transducer failure