

2002 Alkalinity Data for Lakes, Ponds, and Reservoirs

Alkalinity, or buffering capacity, is a measure of the ability of a water body to withstand acidic inputs without becoming more acidic itself. It is measured in mg/l calcium carbonate (CaCO₃). Because most of the soils in Rhode Island are formed from acidic granite, the alkalinity of our waters is usually low. Exceptions are the lakes and ponds in the limestone areas of Rhode Island, such as Lincoln.

USEPA Lake Alkalinity Classification:

Acidified: < 1 ppm; pH < 5

Critical: < 2 ppm

Endangered: 2 - 5 ppm

Highly Sensitive: 5 - 10 ppm

Sensitive: 10 - 20 ppm

Not Sensitive: > 20 ppm

LOCATION	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	MEAN
Concentration at 1M	-----mg/L or ppm CaCO₃-----						
ALMY POND (NEWPORT)	57.1	56.3	63.0	-	-	-	58.8
ALTON POND	3.4	-	7.0	-	-	6.6	5.7
BARBER POND	2.9	-	4.1	-	-	5.8	4.3
BELLEVILLE POND - LOWER	15.0	-	15.9	-	-	13.9	14.9
BELLEVILLE POND - UPPER	13.0	-	-	-	-	-	13.0
BLACKAMORE POND	24.0	-	29.0	-	-	-	26.5
BOONE LAKE	2.9	-	-	-	-	-	-
BOWDISH RESERVOIR	0.0	-	0.8	-	-	0.9	0.6
BREAKHEART POND	-	0.6	2.5	-	-	3.6	2.2
CARBUNCLE POND	3.9	-	3.4	-	-	-	3.7
CARR POND (NK)	10.7	-	13.8	-	-	14.8	13.1
CARR POND (WG)	0.0	-	0.0	-	-	0.0	0.0
CHAPMAN POND	18.6	-	27.3	-	-	24.4	23.4
COOMBER'S RESERVOIR	2.9	-	6.0	-	-	4.5	4.5
DEEP POND	2.3	-	2.3	-	-	3.4	2.7
ECHO LAKE - BARRINGTON	32.7	-	18.7	-	-	16.3	22.6
FLAT RIVER RESERVOIR	3.3	-	4.6	-	-	5.9	4.6
GEORGIAVILLE POND	9.9	-	13.2	-	-	14.1	12.4
HAWKINS POND	9.7	-	14.4	-	-	12.0	12.0
HUNDRED ACRE POND	7.0	-	10.9	-	-	12.8	10.3
INDIAN LAKE	6.4	-	0.3	-	-	2.0	2.9
JILLSON RESERVOIR (ALMY POND)	6.6	-	11.3	-	-	10.3	9.4
KEECH POND	1.3	-	2.8	-	-	4.0	2.7
LAKE WASHINGTON	1.6	-	9.6	-	-	6.1	5.7
LAKE WILLIAM	-	7.1	-	-	-	9.1	8.1
LITTLE POND	4.7	-	5.3	-	-	7.1	5.7
LOCUSTVILLE POND	-	-	4.8	-	-	4.5	4.6
LONG POND (HOPKINTON)	0.0	-	0.0	-	-	0.0	0.0
LONG POND (SK)	0.0	-	0.2	-	-	0.6	0.3
LOWER SPRAGUE RESERVOIR	0.0	-	10.5	-	-	7.0	5.8
MASHAUG POND	66.9	-	48.6	-	-	47.4	54.3
MEADOWBROOK POND	2.2	-	2.3	-	-	1.9	2.2
MELVILLE POND - UPPER	13.2	-	25.7	-	-	22.6	20.5

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Concentration at 1M	-----mg/L or ppm CaCO3-----						
MISHNOCK LAKE	9.7	-	12.0	-	-	-	10.8
NANAQUAKET POND	-	-	87.1	-	-	93.8	90.5
OAK SWAMP RESERVOIR	8.6	-	12.1	-	-	12.2	11.0
PASCOAG RESERVOIR	1.2	-	1.7	-	-	2.3	1.7
PASQUISETT POND	3.2	-	4.1	-	-	5.7	4.3
PRINCE'S POND	70.4	-	81.3	-	-	91.7	81.1
QUEEN - USQ. (GLEN ROCK)	2.7	-	7.1	-	-	3.8	4.5
RANDALL POND	36.4	-	27.2	-	-	28.0	30.5
ROGER WM PARK POND	41.0	-	47.2	-	-	48.5	45.6
SAND POND	3.9	-	5.5	-	-	8.2	5.9
SAUGATUCKET POND	4.4	-	20.9	-	-	21.0	15.4
SCHOOLHOUSE P - LOWER	1.9	-	2.6	-	-	3.4	2.6
SCHOOLHOUSE P - UPPER	1.5	-	2.7	-	-	-	2.1
SECRET LAKE	24.5	-	29.0	-	-	25.0	26.2
SILVER LAKE	8.3	-	7.8	-	-	10.4	8.8
SILVER SPRING LAKE	9.5	-	18.0	-	-	-	13.7
SLACK'S RESERVOIR	11.7	10.3	12.9	12.5	-	-	11.9
SLATER POND	17.4	-	21.7	-	-	18.0	19.0
SLATERSVILLE RES. - UPPER	1.2	-	9.9	-	-	14.0	8.3
SMITH & SAYLES RESERVOIR	2.0	-	4.7	3.3	-	-	3.3
SPALDING POND	-	-	12.3	-	-	6.0	9.2
SPECTACLE POND	23.5	-	24.4	-	-	7.9	18.6
SPRING GROVE POND	5.3	-	5.8	-	-	3.9	5.0
SPRING LAKE	5.8	-	4.1	-	-	5.0	5.0
STAFFORD POND	4.4	-	6.3	-	-	5.6	5.4
STILLWATER POND	-	-	14.4	-	-	15.0	14.7
TARBOX POND	0.0	-	1.2	-	-	0.0	0.4
TARKILN POND	3.8	-	-	-	-	-	-
TIOGUE LAKE	8.9	-	7.5	-	-	9.2	8.5
TUCKER POND	2.0	-	1.7	-	-	2.6	2.1
TURNER RESERVIOR (LOWER)	30.8	-	-	-	-	46.3	38.5
VALLEY FALLS POND	18.9	-	33.7	-	-	33.1	28.5
WALLUM LAKE	1.7	-	1.7	-	-	1.3	1.5
WARWICK POND	25.8	-	17.9	-	-	31.7	25.1
WATCHAUG POND	2.4	-	1.9	-	-	2.2	2.2
WATERMAN RESERVOIR	6.9	-	9.0	-	-	10.6	8.9
WENSCHOTT RESERVOIR	14.9	-	19.1	-	-	20.6	18.2
WESQUAGE POND	18.5	-	-	-	-	33.2	25.9
WHITE POND	0.1	-	-	-	-	0.2	0.2
WILSON RESERVOIR	0.7	-	1.2	-	-	3.4	1.8
WOONASQUATUCKET RES. STUMP	9.3	-	14.9	-	-	14.5	12.9
WYASSUP LAKE	7.7	-	7.0	-	-	7.8	7.5
WYOMING POND	-	-	-	-	-	-	-

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Concentration at 1M	-----mg/L or ppm CaCO3-----						
YAWGOO POND	0.7	1.3	2.3	-	-	3.3	1.9