2000 Ammonium-Nitrogen Data for Lakes, Ponds and Reservoirs

Ammonium-nitrogen is the form of nitrogen present in aquatic systems that is the most reactive. It can adhere to soils and sediment and can be toxic to aquatic organisms at high concentrations. The toxicity of ammonium-nitrogen to aquatic organisms depends on the pH and temperature of the water; for most waters, hundreds of parts per million (ppm; or 100,000 parts per billion, ppb, the units of URI Watershed Watch measurements) are needed for toxic effects (for more information on these relationships and standards, please see the EPA website at www.epa.gov/waterscience/standards/ammonia). No URI Watershed Watch sites have ever shown levels that could be considered toxic to aquatic organism. Quite often these sites have no detectable levels of ammonium-nitrogen. Generally, ammonium-nitrogen is quickly taken up by phytoplankton or other aquatic plants or transformed to nitrate-nitrogen. High levels of ammonium-nitrogen may indicate sewage outfalls or failed septic systems.

LOCATION	MAY	JUNE	JULY	AUG.	OCT.	MEAN
Concentration at 1M			**- - (ug/l or ppb) - -**			
ALTON POND	140	-	60	-	260	**153**
BARBER POND	50	-	ND	-	40	**33**
BELLEVILLE POND - LOWER	80	-	ND	-	ND	**33**
BELLEVILLE POND - UPPER	190	-	70	-	30	**97**
BOONE LAKE	30	-	65	-	-	**48**
BOWDISH RESERVIOR	ND	-	ND	-	-	**ND**
CARBUNCLE POND	60	-	ND	-	30	**33**
CARR POND (NK)	40	-	ND	-	-	**25**
CARR POND (WG)	30	ND	50	-	ND	**25**
CLARK POND	ND	-	ND	-	100	**40**
COOMBER'S RESERVOIR	-	-	55	-	40	**48**
DEEP POND	50	110	ND	-	ND	**45**
FLAT RIVER RESERVOIR	90	ND	280	-	60	**110**
GEORGIAVILLE POND	30	-	60	-	30	**40**
GORTON POND	70	-	ND	-	1860	**647**
HUNDRED ACRE POND	170	-	65	-	50	**95**
INDIAN LAKE	ND	-	ND	-	ND	**ND**
KEECH POND	ND	-	ND	-	40	**20**
LARKIN POND	100	-	140	-	-	**120**
LITTLE POND	50	-	ND	-	310	**123**
LOCUSTVILLE POND	40	-	ND	-	ND	**20**
LONG POND	120	-	25	-	40	**62**
LOWER SPRAGUE RESERVOIR	110	-	35	-	50	**65**
MASHAPAUG POND	400	-	-	-	450	**425**
MEADOWBROOK POND	ND	-	ND	-	30	**17**
MELVILLE POND - UPPER	140	-	145	-	ND	**98**
MISHNOCK LAKE	80	-	50	-	70	**67**
OAK SWAMP RESERVOIR	80	-	ND	-	ND	**33**
PASCOAG RESERVOIR	50	-	ND	-	40	**33**
PASQUISETT POND	30	-	45	-	ND	**28**
PRINCE'S POND	110	-	55	-	120	**95**
QUEEN RIVER AT USQUEPAUG	ND	-	65	-	ND	**28**
QUIDNICK RESERVOIR	ND	-	30	-	30	**23**

LOCATION	MAY	JUNE	JULY	AUG.	OCT.	MEAN
Concentration at 1M			**- - (ug/l or ppb) - -**			
SAND POND	70	-	ND	-	200	**93**
SAUGATUCKET POND	380	-	545	-	550	**492**
SCHOOLHOUSE POND - LOWER	40	50	ND	-	30	**33**
SCHOOLHOUSE POND - UPPER	30	50	ND	-	ND	**25**
SECRET LAKE	50	-	50	-	ND	**37**
SHIPPEE MILL POND	ND	-	ND	-	100	**40**
SILVER LAKE	60	-	ND	-	70	**47**
SILVER SPRING LAKE	80	-	ND	-	30	**40**
SLACK'S RESERVOIR	70	ND	ND	30 / 30	ND	**27**
SLATER POND	30	-	40	-	70	**47**
SMITH AND SAYLES RESERVOIR	30	-	30	-	50	**37**
SPALDING POND	220	-	ND	-	50	**93**
SPECTACLE POND	240	-	ND	-	420	**223**
SPRING GROVE POND	40	-	ND	-	30	**27**
SPRING LAKE	60	-	ND	-	ND	**27**
STAFFORD POND	30	-	ND	-	30	**23**
STILLWATER POND	40	-	50	-	-	**45**
TARBOX POND	ND	-	50	-	30	**30**
TIOGUE LAKE	80	-	95	-	60	**78**
TIPPECANSETT POND	60	-	ND	-	-	**35**
TUCKER POND	140	-	ND	-	ND	**53**
TURNER RESERVIOR	160	-	210	-	70	**147**
UPPER DAM POND	-	-	190	-	-	**190**
UPPER SLATERSVILLE RESERVIOR	130	-	50	-	-	**90**
VALLEY FALLS POND	ND	-	170	-	420	**200**
WARWICK POND	240	-	ND	-	330	**193**
WASH POND	90	-	-	-	-	**90**
WATCHAUG POND	210	-	ND	-	60	**93**
WATERMAN RESERVOIR	90	-	ND	-	ND	**37**
WENSCOTT RESERVIOR	100	-	ND	-	70	**60**
WESQUAGE POND	430	-	90	-	140	**220**
WHITE POND	30	-	ND	-	-	**20**
WOONASQUATUCKET RESERVOIR	140	-	40	-	ND	**63**
WOONASQUATUCKET RES. SOUTH	80	-	130	-	50	**87**
WORDEN POND	50	-	ND	-	30	**30**
WYASSUP LAKE	80	-	ND	-	ND	**33**
WYOMING POND	60	-	35	-	70	**55**
YAWGOO POND	50	60	ND	70 / ND	40	**40**

ND = No Detect Limit of Detection = 20 ppb

Mean calculated using half the limit of detection (10 ppb) for ND

/ # = August / September values