

2003 Ammonium-N Data for Rivers and Tributaries

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.

Section 1. Rivers; Listed alphabetically, upstream to downstream.

LOCATION	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	MEAN
----- (ug/l or ppb) -----							
CHEPACHET RIVER	40	30	ND	40	40	-	31
FALLS RIVER D	70	30	ND	30	20	40	33
FALLS RIVER C	60	30	ND	20	20	40	29
FALLS RIVER B	50	30	ND	20	20	100	38
FALLS RIVER A	40	80	ND	50	20	40	39
GREEN FALLS RIVER #1	ND	ND	30	30	30	40	23
GREEN FALLS RIVER #2	60	ND	ND	30	30	30	27
GREEN FALLS RIVER #3	ND	ND	20	60	50	110	42
LOCSTV.- MOSCOW @ SAWMILL	ND	ND	10	30	20	40	18
LOCSTV.- BRUSHY @ WOODY HILL	ND	ND	100	20	ND	ND	23
LOCSTV.- BRUSHY @ SAWMILL	ND	ND	20	20	40	30	20
MOOSUP RIVER UPSTREAM	60	ND	30	70	ND	70	40
MOOSUP RIVER A	40	ND	30	70	20	30	33
MOOSUP RIVER B	60	ND	60	80	20	50	46
NARROW RIVER-01	110	130	60	80	40	-	84
NARROW RIVER-02 0.5M	-	60	100	-	130	-	97
NARROW RIVER-02 3.0M	-	320	80	-	230	-	210
NARROW RIVER-03 0.5M	170	40	10	-	20	-	60
NARROW RIVER-03 3.0M	1190	50	60	-	60	-	340
NARROW RIVER-04 0.5M	90	40	10	80	ND	-	45
NARROW RIVER-04 3.0M	-	70	30	30	80	-	53
NARROW RIVER-05	70	30	20	70	40	-	46
NARROW RIVER-06	100	70	ND	70	50	-	59
NARROW RIVER-07	110	70	10	90	60	-	68
NARROW RIVER-08	90	120	ND	90	40	-	69
NARROW RIVER-09	60	30	ND	ND	30	-	26
NARROW RIVER-10	90	130	ND	100	60	-	77
NARROW RIVER-11	120	20	30	80	50	-	60
NARROW RIVER-12	90	40	30	80	70	ND	53
PAWCATUCK RIVER @ BRADFORD	40	80	40	60	ND	40	44
P'TUCK RIVER @ AVONDALE 1M	110	60	150	70	90	70	92
P'TUCK RIVER @ AVONDALE 3M	-	160	-	140	140	250	173

2003 Parameter Data: Ammonium-Nitrogen

Section 1. Rivers; Listed alphabetically, upstream to downstream.

LOCATION	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	MEAN
----- (ug/l or ppb) -----							
QUEEN RIVER (SHERMAN BRK)	ND	30	20	ND	20	20	17
QUEEN RIVER (BROWNELL'S)	ND	40	20	-	20	-	21
QUEEN RIVER (SAND BRIDGE)	ND	40	30	30	30	30	28
QUEEN RIVER (LOCKE BROOK)	ND	40	10	ND	20	30	18
SHUNOCK RIVER @ BABCOCK	ND	-	50	-	-	70	42
SHUNOCK RIVER @ HEWITT	ND	-	60	-	-	70	45
WOONASQ RIV @ DANIGIAN PARK	330	150	50	40	110	150	138

Section 2. Tributaries; Alphabetically by lake, upstream to downstream as appropriate.

LOCATION	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	MEAN
----- (ug/l or ppb) -----							
ASSECONK SWAMP	ND	-	ND	-	-	60	23
BARBER - MUD BROOK	ND	ND	30	-	90	40	34
BELLEVILLE @ RR XING	50	-	ND	-	-	60	38
BELLEVILLE @ SLUICEWAY	50	-	30	-	-	50	43
BOONE TRIBUTARY #1	-	-	-	-	-	-	-
CARR INLET (NK)	-	-	ND	-	-	40	23
GEORGIAVILLE @ CAPRON POND	-	-	60	-	-	70	65
GEORGIAVILLE @ HARRIS	-	-	-	-	-	70	70
PASQUIETT TRIBUTARY	-	-	60	-	-	60	60
SAWMILL POND TRIBUTARY	-	-	70	-	70	-	70
SECRET - OAK HILL EAST	ND	-	50	-	-	40	32
SECRET - OAK HILL WEST	ND	-	40	-	-	40	28
SECRET - SHORE DR.	ND	-	50	-	-	60	38
SHICKASHEEN - A @ RTE 2	40	ND	90	180	30	210	93
SHICKASHEEN - B @ MISKIANIA	110	50	20	-	30	30	48
SHICKASHEEN - C @ BARBER OUTLET	40	80	20	-	-	60	50
SHICKASHEEN - D @ RTE 138	-	-	60	-	50	70	60
SLACK'S TRIBUTARY #1 (A)	ND	80	160	230	-	300	155
SLACK'S TRIBUTARY #2 (B)	ND	50	30	20	190	100	66
SLACK'S TRIBUTARY #3 (C)	ND	ND	ND	ND	ND	580	101
SLACK'S TRIBUTARY #4 (D)	ND	40	ND	40	30	360	80
SMITH & SAYLES @ KEECH	-	-	-	-	-	60	60
SMITH & SAYLES @ BALCOM	-	-	-	-	-	20	20
SMITH & SAYLES @ O'DONNELL	-	-	-	-	-	20	20
STAFFORD INLET - UPSTREAM	-	-	-	-	190	-	190
STAFFORD INLET - DOWNSTREAM	-	-	200	-	-	270	235
STAFFORD NE COVE	-	-	30	-	-	160	95
WATERMAN - RTE 44	ND	-	70	-	-	50	42
WATERMAN - SAWMILL	ND	-	60	-	-	80	48

ND = No Detect Limit of Detection = 10 ppb
 Mean calculated using half the limit of detection (5 ppb) for ND