

The Bear Brook Watershed in Maine Annual Solute Flux Data

Wet Deposition, eq/ha/yr (WY=Water Year as Oct. 1 - Sept. 30)												Addition
WY	Ca	Mg	K	Na	NH ₄	NO ₃	Cl	SO ₄	H	H ₂ O (mm)	NH ₄ trmt	
1988	42.4	28.3	8.3	89.9	38.9	183	119	323	334	891		
1989	30.4	37.7	9.1	157.0	102.0	230	195	408	427	1431		
1990	30.1	31.9	7.6	121.0	96.8	216	171	381	447	1411	1886	
1991	34.2	33.5	11.1	115.0	93.1	173	151	320	328	1441	1905	
1992	31.5	41.0	12.0	153.0	85.6	165	194	300	328	1168	1812	
1993	35.5	26.5	10.0	98.2	75.9	163	146	299	345	1064	1812	
1994	39.8	43.4	10.5	180.0	97.4	184	228	304	371	1338	1800	
1995	41.8	35.6	9.8	134.0	90.2	166	163	231	288	1211	1800	
1996	59.4	85.4	15.3	347.0	110.0	219	453	321	341	1699	1800	
1997	63.6	40.6	22.9	142.0	117.0	258	198	364	413	1184	1800	
1998	49.0	25.8	10.8	99.2	87.2	144	138	243	264	1224	1800	
1999	59.4	77.8	20.2	308.0	130.0	217	338	431	342	1403	1800	
2000	47.6	55.8	11.5	265.0	140.0	232	313	365	401	1239	1800	
2001	28.7	28.7	10.0	131.0	66.1	126	142	214	224	977	1800	
2002	47.6	35.3	11.6	131.0	146.0	206	150	271	290	1179	1800	
2003	29.2	36.7	9.4	134.0	62.7	116	158	177	200	1233	1800	
2004	45.1	43.4	16.2	186.0	40.0	130	203	223	223	1302	1800	
2005	29.0	36.1	12.6	164.0	87.4	115	178	212	218	1355	1800	
2006	48.2	71.0	21.1	240.0	135.0	147	247	258	258	2033	1800	
2007	36.1	29.2	23.1	104	27.6	130	132	229	198	1411.3	1800	
2008	20.2	12.3	6.4	133	1.8	123	141	228	224	1659.6	1800	
2009												
2010												

Manipulations to West Bear began in November, 1989

East (E) and West (W) Bear Stream Solute Flux Data

All data in eq/ha/yr or mol/ha/yr except for H₂O which is in 10⁶ liters.

WY	EB H ₂ O	WB H ₂ O	EDOC	WDOC	ECI	WCI	ENO ₃	WNO ₃	ESO ₄	WSO ₄	ENH ₄	WNH ₄	ESI	WSI	EN flux	WN Flux
1988			1400	1910			139	128	1109	1120						
1989	106	111	2218	2419	616	697	183	216	1014	1177	14.0	14.0	495	665	197	230
1990	93	94	1574	1432	545	610	101	185	928	1151	3.0	6.0	516	673	104	191
1991	106	114	1720	1563	504	603	144	502	996	1550	4.0	11.0	565	786	148	513
1992	89	90	1224	1097	507	560	41	373	833	1356	2.0	12.0	498	667	43	385
1993	84	97	1173	1230	463	529	26	414	755	1417	1.0	27.0	450	581	27	441
1994	103	115	1552	1645	667	823	16	409	904	2076	0.0	0.0	517	768	16	409
1995	66	65	1030	853	421	463	13	395	587	1195	2.0	10.0	380	479	15	405
1996	156	132	2632	1834	1312	1267	14	443	1212	2446	9.0	13.0	807	822	23	456
1997	100	89	1632	1186	609	621	26	354	829	1562	1.0	11.0	534	620	27	365
1998	105	115	2120	1874	535	708	8	444	865	2075	2.0	7.0	534	784	10	451
1999	96	99	1477	1394	589	676	36	716	799	1731	9.0	27.0	462	635	45	743
2000	114	103	2074	1644	884	862	15	450	895	1787	13.0	17.0	604	752	28	467
2001	54	51	1038	911	344	371	4	203	440	907	1.0	3.0	305	390	5	206
2002	76	72	1496	1208	544	590	8	238	615	1354	6.0	9.0	429	544	14	247
2003	90	87	1763	1649	506	593	6	132	715	1551	0.9	24.1	468	578	7	156
2004	118	115	521	481	767	854	3	142	911	1990						142
2005	119	114	2099	1525	595	646	6	313	917	1931						
2006	144	159	2255	2387	679	821	9	484	1045	2439					9	484
2007	108	114	1836	1781	420	496	20	563	729	1703						
2008	130	131	2548	2330	507	598	7	483	826	2021						
2009																
2010																

WY	ECa	WCa	EK	WK	EMg	WMg	ENa	WNa	EH	WH	EAI	WAI	EANC	WANC
1988														
1989	768	904	86	117	289	354	749	857	34	25	42	34	55	109
1990	666	834	54	76	240	318	645	759	28	25	29	31	39	69
1991	714	1162	57	94	264	455	659	846	32	51	40	90	21	27
1992	602	1019	42	76	227	395	579	712	21	45	24	65	30	10
1993	532	985	40	98	202	369	546	652	18	68	21	126	28	5
1994	628	1322	51	110	226	451	700	927	42	111	42	221	14	3
1995	420	816	31	65	150	283	493	574	22	71	17	147	5	2
1996	925	1517	78	120	347	523	1253	1252	75	175	70	147	11	0
1997	552	864	51	75	205	302	673	684	52	99	43	197	22	0
1998	485	1065	49	109	185	400	638	864	32	134	27	184	21	0
1999	529	1020	50	110	212	399	658	807	26	121	23	220	15	1
2000	574	934	54	99	229	349	885	901	56	182	35	230	8	0
2001	282	495	22	44	111	187	411	469	14	63	14	102	24	2
2002	385	685	33	58	156	265	606	658	23	90	24	178	24	2
2003	400	743	32	65	169	295	646	725	28	101	31	183	20	1
2004	599	979	48	91	228	365	891	995	38	145	28	174	32	0
2005	540	917	53	88	215	358	792	893	38	157	10	78	37	1
2006	687	1291	50	109	277	499	925	1199	32	220	25	222	63	0
2007	427	860	52	101	187	351	579	728	26	158	66	266	59	1
2008	505	1008	45	94	202	380	678	897	32	184	71	285	66	1
2009														
2010														

Note: For additional information on these or other Bear Brook Watershed in Maine data contact Ivan J. Fernandez (ivanjf@maine.edu) or Sarah Nelson (Sarah_Nelson@umit.maine.edu) at the University of Maine.