Aroostook River Wet Weather Tributary Surveys
May 15, 2001

Rainfall Totals	inches
Presque Isle WWTP	
Caribou	
Ashland	

Station Code	Location	Depth (M)	Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C	TSS ppm	VSS ppm	TP ppb	PO4-P ppb
t-SCS	St Croix Str Rte 11	mid depth	15:15	9.1	82.1%	10.8	2.7	2.3	12	4.3
t-SPS	Squa Pan Str Rte 11	mid depth	15:00	9.2	86.3%	12.5	<1	<1	12	4.8
t-MR	Machias R Garfield Rd	mid depth	14:50	9	80.1%	10.2	2.1	1.2	13	4.1
t-LMR	L Machias R, Rte 11	mid depth	14:35	8.8	77.6%	9.8	6	3.6	18	9.6
t-AB	Alder Brook Ashland	mid depth	14:05	9.4	81.9%	9.3	8.9	3.9	24	8.7
t-GAB	Gardner Brook, Wade	mid depth	13:25	10	83.8%	7.7	3	2.4	13	6.3
t-SB	Salmon Brook Washburn	mid depth	13:05	9.4	81.5%	9.1	5.5	3.4	16	4.7
t-CB	Clayton Brook Washburn	mid depth	12:45	9.7	81.7%	7.9	8.7	6.4	39	17
t-NBP	North Branch P. I. Str in Mapleton	mid depth	15:45	8.8	78.9%	10.5	4.6	3.1	18	9.4
t-MB	Merritt Brook	mid depth	11:50	9.9	85.4%	8.9	14	5	49	13
t-HB	Hardwood Brook Maysville	mid depth	11:00	9.9	84.2%	8.3	5.5	2.5	16	5.2
t-PB	Prestile Brook Caribou	mid depth	10:50	10.3	87.0%	8	18	11	20	11
t-CS	Caribou Str Caribou	mid depth	11:25	9.9	86.3%	9.3	5.2	1.9	11	7.5
t-OB	Otter Brook Caribou	mid depth	10:40	10.3	87.6%	8.3	7.5	3	22	5.8
t-GRB	Gray Brook Fort Fairfield	mid depth	10:25	10.7	90.1%	7.9	7.3	4.6	51	5.9
t-HHB	Hockenhull Bk. Fort Fairfield	mid depth	10:13	10.7	90.6%	8.1	10	3.7	30	11
t-DB	Dug Brook	mid depth	14:15	10.3	86.3%	7.7	3.4	1.3	5.2	1.8

Aroostook River Wet Weather Tributary Surveys

May 31, 2001

Rainfall Totals	inches
Presque Isle WWTP	
Caribou	
Ashland	

Station Code	Location	Depth (M)	Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C	TSS ppm	VSS ppm	TP ppb	PO4-P ppb
t-SB	Salmon Brook Washburn	mid depth	12:47	9.7	88.6%	11.3	6.7	6.3	19	3.5
t-CB	Clayton Brook Washburn	mid depth	12:32	10.2	90.8%	10.2	6.1	5.5	28	4.5
t-NBP	North Branch P. I. Str in Mapleton	mid depth	12:13	9	86.8%	13.7	26	8.2	97	6.7
t-MB	Merritt Brook	mid depth	10:04	10.6	94.1%	10.1	8	5.9		3.8
t-HB	Hardwood Brook Maysville	mid depth	11:30	10.3	93.8%	11.2	11	6.3	35	3.7
t-PB	Prestile Brook Caribou	mid depth	13:18	10.6	95.9%	10.9	37	15	64	5
t-CS	Caribou Str Caribou	mid depth	11:06	10.1	95.2%	12.7	23	5.5	51	8.7
t-OB	Otter Brook Caribou	mid depth	10:58	10.8	96.8%	10.5	9.6	9.4	20	3
t-GRB	Gray Brook Fort Fairfield	mid depth	10:33	11.8	101.8%	8.9	5.3	4.5	16	1.7
t-HHB	Hockenhull Bk. Fort Fairfield	mid depth	10:21	11.2	101.1%	10.8	10	6.3	34	6.4

June 3, 2001

Rainfall Totals	inches
Presque Isle WWTP	
Caribou	
Ashland	

Station Code	Location	Depth (M)	Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C	TSS ppm	VSS ppm	TP ppb	PO4-P ppb
t-SCS	St Croix Str Rte 11	mid depth	9:20	9	84.8%	12.7	4.8	4.4	14	2.6
t-SPS	Squa Pan Str Rte 11	mid depth	9:06	9.9	90.0%	11.1	4.5	3.5	15	2.7
t-MR	Machias R Garfield Rd	mid depth	8:50	9.9	91.7%	11.9	3.8	2.4	8.2	2.1
t-LMR	L Machias R, Rte 11	mid depth	8:35	9.3	87.9%	12.8	5.3	4.4	14	4.4
t-AB	Alder Brook Ashland	mid depth	9:47	10.3	92.1%	10.4	6.1	4.9	19	2.7
t-AB Dupli.	Alder Brook Duplicate	mid depth					6	5.6	17	3.2
t-GAB	Gardner Brook, Wade	mid depth	10:40	10.6	93.5%	9.8	3.7	3.1	8.5	1.9

June 4, 2001

t-LMR	L Machias R, Rte 11	mid depth					35	6.1	62	38

Aroostook River Wet Weather Tributary Surveys
July 16, 2001

Rainfall Totals	inches
Presque Isle WWTP	
Caribou	
Ashland	

Station Code	Location	Depth (M)	Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C	TSS ppm	VSS ppm	TP ppb	PO4-P ppb
t-SCS	St Croix Str Rte 11	mid depth	6:50	7.1	77.8%	19.8	2.1	1.3	12	2.7
t-SPS	Squa Pan Str Rte 11	mid depth	6:36	8	84.7%	18.1	2.6	1.2	10	1.3
t-MR	Machias R Garfield Rd	mid depth	6:20	7.9	85.7%	19.3	3	1.5	8.7	<1
t-LMR	L Machias R, Rte 11	mid depth	6:00	7.5	80.4%	18.7	5.8	3.1	23	1.3
t-AB	Alder Brook Ashland	mid depth	7:32	8.1	82.4%	16.2	3.6	2.3	14	9.1
t-GAB	Gardner Brook, Wade	mid depth	8:30	9.2	90.6%	14.7	1.2	<1	5.9	1.8
t-SB	Salmon Brook Washburn	mid depth	8:55	8.2	84.8%	17	1.8	1	15	5.1
t-SB dup	Salmon Brook Washburn	mid depth	8:55				1.3	1.1	15	5.6
t-CB	Clayton Brook Washburn	mid depth	8:10	8.3	82.8%	15.3	7.1	2.7	15	13
t-NBP	North Branch P. I. Str in Mapleton	mid depth	8:20	6	64.4%	18.8	6.6	2.8	33	4.9
t-MB	Merritt Brook	mid depth	6:26	6.6	64.7%	14.5	19	3.9	50	8.4
t-HB	Hardwood Brook Maysville	mid depth	7:55	8	80.9%	15.9	6.6	2.7	48	17
t-PB	Prestile Brook Caribou	mid depth	7:40	7.9	79.0%	15.4	8.1	2.4	65	23
t-CS	Caribou Str Caribou	mid depth	7:30	7	75.0%	18.7	3.2	1.7	28	3.2
t-OB	Otter Brook Caribou	mid depth	7:20	7.6	76.7%	15.8	1.9	0.8	11	2.3
t-GRB	Gray Brook Fort Fairfield	mid depth	7:05	8.5	79.6%	12.4	4.7	3.1	36	11
t-HHB	Hockenhull Bk. Fort Fairfield	mid depth	6:45	7.6	76.0%	15.4	150	22.8	450	53

Effluents

Numbers in **boldface** indicate treatment facility data

Station Code	Location	TP ppb	PO4-P ppb	TKN ppm	NH3-N ppm	N02,3-N, ppm	N02,3-N, ppm	Chl a ppb	BOD5 ppm	TBODu ppm	CBODu ppm	NBODu ppm	TSS/VSS ppm
ASH	Ashland	910	630	2.8	0.25	0.01	2.8	122	20	40	27.9	12.1	12 / 10
WAS	Washburn	3000	2600	5	0.46	0.63	4.1	502	6	88	73.0	15.0	45 / 40
PRI	Presque Isle	250	110	1	0.02	2.4	2.5	3.2	2	11.8	11.4	0.4	5 / 5
MCC	McCains	6700	6400	< 1	0.01	130	120	2.8	3	8.3	8.3	0.0	3 / 2
CAR	Caribou	9300	8200	5.2	1.4	23	24	59.3	17	47	42.7	4.3	/ 23
LOR	Loring	380	340	0.4	0.02	2.6	2.9	2.4	4	6.8	5.5	1.3	1 / 1
FTF	Fort Fairfield	3300	2800	5.9	2.4	7.5	17	7.2	43	78	36.9	41.1	12 / 11

Aroostook River Intensive Survey

August 14-16, 2001

Flow (cfs)	USGS Washburn	AR6	PIS0	LM2	CS
14-Aug	155	192	5.5	27.8	4.2
15-Aug	143				
16-Aug	137				

Station Code	Location	Date	TSS ppm	VSS ppm	TP ppb	PO4-P ppb	TN ppm	NH3-N ppm	NO2-N ppm	$NO3\text{-}N_i$ ppm	$NO3\text{-}N_f$ ppm	Chl a ppb	TBODu ppm	CBODu ppm	NBODu ppm	BOD Kd /day	Secchi* (m)
AR0	Rte 11 Ashland	14-Aug	1	< 1	10	1.2	0.31	< .04	< .01	< .01	0.16	1.4	3.9	3.2	0.7	0.034	
		15-Aug	< 1	< 1	4.2	1.7	0.29	< .04	< .01	< .01	0.15	1.4	4.5	3.9	0.6	0.046	
		16-Aug	< 1	< 1	7.7	1.4	0.31	< .04	< .01	< .01	0.13	< 1	3.8	3.2	0.6	0.043	
AR0a	Ashland below	14-Aug	< 1	< 1	11	1	0.32	< .04	< .01	< 0.01	0.26	2.4	5.4	4.3	1.1	0.047	
		15-Aug	1	1	3.5	1.9	0.29	< .04	< .01	< .01	0.2	1.9	4.4	3.5	0.9	0.038	
		16-Aug	< 1	< 1	3.8	< 1	0.31	< .04	< .01	< .01	0.18	< 1	4.2	3.4	0.8	0.036	
AR1	River Rd Washburn	14-Aug	< 1	< 1	10	< 1	0.3	< .04	< .01	<.01	0.22	< 1	4.7	3.7	1.0	0.031	
		15-Aug	< 1	< 1	3.5	1.7	0.29	< .04	< .01	0.01	0.17	1.6	3.8	3.1	0.7	0.042	
		16-Aug	< 1	< 1	4.3	< 1	0.29	< .04	< .01	< .01	0.18	< 1	4	3.2	0.8	0.042	
AR1a	Crouseville	14-Aug	1	< 1	8.9	1	0.32	< .04	< .01	0.01	0.27	< 1	5.1	4.0	1.1	0.037	
		15-Aug	< 1	< 1	6.5	1.7	0.3	< .04	< .01	0.02	0.21	< 1	4.5	3.7	0.8	0.039	
		16-Aug	< 1	< 1	5.7	< 1	0.32	< .04	< .01	0.02	0.2	1.4	3.7	2.9	0.8	0.051	
AR2	.5 mi above Rte 1, P. I.	14-Aug	< 1	< 1	16	3.9	0.31	< .04	< .01	< .01	0.2	1	4.1	3.2	0.9	0.033	
		15-Aug	1	1	3.8	1.7	0.31	< .04	< .01	0.01	0.19	< 1	4.1	3.3	0.8	0.048	
		16-Aug	< 1	< 1	9	1.9	0.31	< .04	< .01	< .01	0.19	6.1	3.8	3.0	0.8	0.053	
AR3	Maysville	14-Aug	< 1	< 1	23	1	1.43	< .04	0.03	1.09	1.32		8	7.0	1.0	0.061	
		15-Aug	< 1	< 1	20	6.2	1.36	< .04	< .01	0.99	1.12	5.1	4.5	3.9	0.6	0.068	
		16-Aug	< 1	< 1	16	4.6	1.4	< .04	0.01	1.01	1.14	2.9	4.4	3.8	0.6	0.063	
AR4	McGraw	14-Aug	< 1	< 1	26	6.5	1.97	0.04	0.01	1.6	1.35	3.2	5.2	5.2	0.0	0.053	>2.5
		15-Aug	1.9	1.9	23	6.3	2.19	0.05	0.04	1.78	1.61	6.3	5.6	5.6	0.0	0.074	>2.5
		16-Aug	0.8	< 1	25	7.9	1.92	0.04	0.05	1.4	1.37	4.9	5.4	5.4	0.0	0.066	
AR5	Above Caribou Dam	14-Aug	1	< 1	24	1.3	1.75	< .04	0.05	1.3	1.23	12	7.6	7.6	0.0	0.062	2.7
		15-Aug	1.5	1.5	20	1.9	1.81	< .04	< .01	1.35	1.18	10	5.9	5.9	0.0	0.069	2.4
		16-Aug	2.8	< 1	16	2.2	1.8	< .04	0.03	1.3	1.34	21	5.9	5.7	0.2	0.061	
AR6	Below Little Madaw. R	14-Aug	< 1	< 1	78	40	1.33	< .04	0.03	0.93	1.19	9.7	5.5	4.4	1.1	0.066	
		15-Aug	1	1	80	2.1	1.4	< .04	< .01	0.94	1.26	7.5	5.6	4.2	1.4	0.068	
		16-Aug	1.3	< 1	66	40	1.53	< .04	0.03	1.04	1.37	7.5	5.2	3.8	1.4	0.061	
AR7	Goodwin	14-Aug	< 1	< 1	38	9.8	1.22	< .04	0.03	0.82	1.05	7.2	5.4	4.4	1.0	0.061	
		15-Aug	1.1	1.1	27	4.6	1.3	< .04	0.03	0.92	1.19	6.3	6.3	5.1	1.2	0.07	
		16-Aug	1.2	< 1	28	3.8	1.37	< .04	0.03	1.06	1.22	7.1	5.5	4.8	0.7	0.059	
AR8	Stevensville	14-Aug	2.2	1	31	5	1.16	0.04	0.02	0.67	1.12	6.9	9.8	7.9	1.9	0.044	
		15-Aug	2.8	2.6	31	5.5	1.25	0.04	0.03	0.81	1.11	11	5.8	4.5	1.3	0.075	
		16-Aug	4	< 1	35	5.4	1.33	< .04	0.02	0.89	1.14	9.8	5.8	4.7	1.1	0.061	
AR9	Rte 1a Fort Fairfield	14-Aug	< 1	< 1	56	22	0.91	< .04	< .01	0.32	0.73	7.2	9.2	7.4	1.8	0.042	1.8
		15-Aug	1.2	1	52	22	1.31	< .04	0.02	0.57	0.81	8.8	5.7	4.7	1.0	0.078	1.8
		16-Aug	3.6	< 1	42	11	1.2	< .04	0.02	0.66	0.95	8.5	5.9	4.6	1.3	0.072	
AR10	USA - Canada Border	14-Aug	1.8	< 1	31	1.2	0.71	< .04	< .01	0.16	0.47	15	6.7	5.4	1.3	0.069	1.8
		15-Aug	2.4	2.1	27	1.7	0.64	< .04	< .01	0.11	0.45	28	8.1	6.6	1.5	0.072	1.4
		16-Aug	1	< 1	33	1.9	0.64	< .04	< .01	0.06	0.4	10	7.6	6.1	1.5	0.061	
AR1 AR5 AR9	River Duplicate	14-Aug	< 1	< 1	8.4	1	0.3	< .04	< .01	< .01	0.18	< 1	3.8	3.0	0.8	0.036	
		15-Aug	< 1	< 1	18	2.2	1.79	< .04	0.04	1.33	1.22	12	7.4	7.4	0.0	0.046	
		16-Aug	1	< 1	42	12	1.17	< .04	0.02	0.65	0.86	8.7	5.9	5.0	0.9	0.064	

* Secchi depth readings were only taken in impoundments where there was adequate depth.

$NO3\text{-}N_i$ = Nitrate-N reading at start of BOD test

$NO3\text{-}N_f$ = Nitrate-N reading at end of BOD test

Aroostook River Intensive Survey

August 14-16, 2001

Major Tributaries

Station Code	Location	Date	TSS ppm	VSS ppm	TP ppb	PO4-P ppb	TN ppm	NH3-N ppm	NO2-N ppm	$NO3\text{-}N_i$ ppm	$NO3\text{-}N_f$ ppm	Chl a ppb	TBODu ppm	CBODu ppm	NBODu ppm	BOD Kd /day	Flow (cfs)
Presque Isle Stream																	
PIS0	Park St	14-Aug	3.5	1.4	23	1.3	0.55	< .04	< .01	0.04	0.3	2.9	7.7	6.6	1.1	0.046	5.5
		15-Aug	2.3	1.7	23	2.1	0.59	< .04	< .01	0.08	0.37	5.1	10.9	9.6	1.3	0.061	
		16-Aug	2.4	< 1	16	< 1	0.52	< .04	< .01	0.05	0.35	5.8	9.2	7.9	1.3	0.042	
PIS8	Parson St Connector	14-Aug	5	2.5	49	10	1.27	0.04	< .01	0.68	0.94	4.6	8.9	7.8	1.1	0.054	
		15-Aug	22	2.2	41	15	1.41	0.05	< .01	0.98	1.27	4.3	7.6	6.3	1.3	0.051	
		16-Aug	3.4	< 1	49	24	2.04	0.05	0.01	1.49	1.57	2.6	8.8	8.5	0.3	0.051	
PIS13	Railroad Trestle	14-Aug	6.2	2.1	52	11	1.56	0.04	0.01	0.94	1.26	4.1	9.8	8.4	1.4	0.054	
		15-Aug	4.4	4.2	81	7	1.8	0.05	< .01	1.11	1.2	3.2	25.1	24.7	0.4	0.07	
		16-Aug	< 1	< 1	43	18	1.7	0.05	0.01	1.71	1.67	5.1	8	8.0	0.0	0.05	
Little Madawaska River																	
LM1	Bowles Rd	14-Aug	< 1	< 1	13	1	0.65	< .04	< .01	0.41	0.56	2.5	4.1	3.5	0.6	0.046	
		15-Aug	< 1	< 1	7.9	1.7	0.63	< .04	< .01	0.36	0.56	2	4.7	3.8	0.9	0.081	
		16-Aug	0.4	< 1	7.3	< 1	0.66	< .04	< .01	0.38	0.53	1.3	3.9	3.3	0.6	0.059	
LM2	Grimes Rd	14-Aug	< 1	< 1	12	1.2	0.95	< .04	< .01	0.68	0.86	2.5	3.5	2.7	0.8	0.068	27.8
		15-Aug	< 1	< 1	4.9	1.7	0.99	< .04	< .01	0.71	0.85	2.1	4.3	3.7	0.6	0.104	
		16-Aug	0.7	< 1	7	< 1	1.01	< .04	< .01	0.71	0.85	2.7	3.5	2.9	0.6	0.065	
CS	Caribou Stream	14-Aug	< 1	< 1	14	1.2	0.61	< .04	< .01	0.32	0.49	3.2	4.1	3.4	0.7	0.071	4.2
		15-Aug	1.2	1.2	8.6	1.6	0.63	< .04	< .01	0.31	0.5	2.1	5.3	4.5	0.8	0.099	
		16-Aug	1.8	< 1	12	2	0.63	< .04	< .01	0.31	0.52	2.9	5.4	4.5	0.9	0.073	
PIS0 PIS8 LM2	Tributary Duplicate	14-Aug	5.6	2.4	23	1.7	0.54	< .04	< .01	0.04	0.29	4.4	9.6	8.5	1.1	0.048	
		15-Aug	2.6	2.2	44	12	1.45	0.05	< .01	0.98	1.18	5.4	9.1	8.2	0.9	0.056	
		16-Aug	0.2	< 1	4.9	< 1	0.99	< .04	< .01	0.74	0.88	6.3	3.7	3.1	0.6	0.055	

$NO3\text{-}N_i$ = Nitrate-N reading at start of BOD test

$NO3\text{-}N_f$ = Nitrate-N reading at end of BOD test

Aroostook River Intensive Survey

August 12-16, 2001 (Sun - Thurs)

Numbers in **boldface** indicate treatment facility data

Effluents

Station Code	Location	Date	TSS ppm	VSS ppm	TP ppb	PO4-P ppb	TN ppm	NH3-N ppm	NO2-N ppm	NO3-N_i ppm	NO3-N_f ppm	Chl a ppb	BOD5 ppm	TBODu ppm	CBODu ppm	NBODu ppm	Flow (mgd)
ASH	Ashland	12-Aug	11	10.6	800	410	2.48	0.12	< .01	0.015		89	10				**0.052**
		13-Aug	6.9	6	860	410	2.73	0.12	< .01	0.01	<.01	82	9	32	32	0	**0.042**
		14-Aug	5.2	5.2	1300	430	0.29	0.19	< .01	0.01	0.01	52	7	31	31	0	**0.048**
		15-Aug															**0.051**
		16-Aug											**8**				**0.037**
WAS	Washburn	12-Aug	33	31.5	4200	3000	7.46	2.4	0.224	0.7	0.69	170	14	87	87	0	**0.041**
		13-Aug	67	64.6	5900	3200	11	2.3	0.3	0.73	0.74	560	12	153	153	0	**0.049**
		14-Aug	100	98	6200	3100	20.8	2.1	0.26	0.75	0.76	1100	19	296	296	0	**0.057**
		15-Aug															**0.032**
		16-Aug															**0.038**
PRI	Presque Isle	12-Aug	6.7	5.6	420	170 **140**	7.47	**0.05** 0.06	< .01	6.78	6.9	8.1	2 / **2**	8.4	7.9	0.5	**0.89**
		13-Aug	4.3	3.7	440	150 **160**	7.05	**0.05** 0.11	< .01	6.2	6.5	6	2 / **3**	7.8	6.5	1.3	**1.08**
		14-Aug	3.1	2.7	490	150 **140**	6.96	**0.04** 0.08	< .01	6.27	6.3	3.8	2 / **4**	8.9	8.8	0.1	**1.00**
		15-Aug											**2**				**0.98**
		16-Aug															**1.00**
MCC	McCain Foods	12-Aug	10	6.4	4200	3000	134	0.05	0.24	118	120	11	5 / **2**	10	10.0	0.0	**2.16**
		13-Aug	3.3	3.3	4800 **3250**	3300	128	0.16	< .01	111	120	<1	3 / **4**	16	16.0	0.0	**2.12**
		14-Aug	< 1	< 1	6700	4200	139	0.05	0.77	111	120	2	1 / **13**	8	8.0	0.0	**2.09**
		15-Aug											**5**				**1.64**
		16-Aug											**5**				**1.43**
CAR	Caribou	12-Aug	41	27.7	18000	9400	19.2	1	0.68	13.4	14	30	29	60	57.4	2.6	**0.667**
		13-Aug	31	20.1	15000	9600	32.5	0.3	0.55	14.6	15	27	26	48	46.3	1.7	**0.638**
		14-Aug	34	25.3	20000	9700	19.7	0.2	0.43	14.3	14	58	19 / **26**	51	51.0	0.0	**0.61**
		15-Aug											26 / **24**				**0.60**
		16-Aug											24 / **14**				**0.592**
LOR	Loring	12-Aug	3.6	2.9	660	460	3.68	< .04	0.06	3.15	3.3	< 1	2	7.1	6.5	0.6	**0.319**
		13-Aug	< 1	< 1	860	490	3.5	< .04	0.04	3.1	3.2	< 1	1	6.3	5.9	0.4	**0.329**
		14-Aug	5.4	2.2	860	490	1.54	0.04	0.05	1.68	3.4	< 1		5.2	4.7	0.5	**0.347**
		15-Aug											**2.3**				**0.337**
		16-Aug											**1.1**				**0.339**
FTF	Fort Fairfield	12-Aug	21	16.3	22000	17000	41.1	1.9	0.7	34.3	35	1.4	19 / **35**	44	41.0	3.0	**0.279**
		13-Aug	24	16.8	31000 **18000**	18000 **18000**	46	4	0.71	32.7	35	3.8	17 / **35**	50	40.0	10.0	**0.303**
		14-Aug	23	18.9	10000 **18000**	18000 **18000**	37	3	0.72	27.6	28	1.9	22 / **30**	59	57.3	1.7	**0.295**
		15-Aug			**18000**	**18000**							**25**				**0.299**
		16-Aug											**27**				**0.303**
FTF MCC	Effluent Duplicate	12-Aug															
		13-Aug	43	32.5	36000	18000	43.6	4	0.71	32.6	34	4.3	26	90	83.9	6.1	
		14-Aug	1.8	1.6	6800	4400	146	0.05	0.76	110	120		2	9			
		15-Aug															
		16-Aug															

NO3-N_i = Nitrate-N reading at start of BOD test

NO3-N_f = Nitrate-N reading at end of BOD test

Aroostook River Dry Weather Tributary Survey
August 13, 2001

Station Code	Location	Depth (M)	Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C	TSS ppm	VSS ppm	TP ppb	PO4-P ppb
t-SCS	St Croix Str Rte 11	mid depth			0.0%		2.3	1.9	19	< 1
t-SPS	Squa Pan Str Rte 11	mid depth			0.0%		2.4	2.2	13	< 1
t-MR	Machias R Garfield Rd	mid depth			0.0%		2.2	1.2	13	< 1
t-LMR	L Machias R, Rte 11	mid depth			0.0%		1.7	1.7	15	< 1
t-LMR dup	L Machias R, Rte 11	mid depth					2.5	2.5	10	1.1
t-AB	Alder Brook Ashland	mid depth			0.0%		3.9	1.4	26	< 1
t-GAB	Gardner Brook, Wade	mid depth			0.0%		< 1	< 1	7.5	1.6
t-SB	Salmon Brook Washburn	mid depth			0.0%		3.5	2.4	14	< 1
t-CB	Clayton Brook Washburn	mid depth			0.0%		2.5	1.7	18	3.3
t-NBP	North Branch P. I. Str in Mapleton	mid depth			0.0%		16	6.6	51	1.1
t-MB	Merritt Brook	mid depth			0.0%		5.7	3.7	24	6.4
t-HB	Hardwood Brook Maysville	mid depth			0.0%		3.1	2.7	16	< 1
t-PB	Prestile Brook Caribou	mid depth			0.0%		3.7	2.8	27	9.9
t-CS	Caribou Str Caribou	mid depth			0.0%		1.4	1.4	18	< 1
t-OB	Otter Brook Caribou	mid depth			0.0%		< 1	< 1	10	1.2
t-GRB	Gray Brook Fort Fairfield	mid depth			0.0%		1.8	1.6	59	34
t-HHB	Hockenhull Bk. Fort Fairfield	mid depth			0.0%		3.2	2.9	20	4.7

Aroostook River Low Flow Survey

August 14, 2001

Station Code	Location	Depth (M)	Morning Sampling Run Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C	Afternoon Sampling Run Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C
AR0	Rte 11 Ashland	mid depth	7:20	7.4	82.8%	20.9	14:20	8.4	100.0%	24.1
AR0a	Ashland below	mid depth	7:30	7.3	81.7%	20.9	14:32	8.6	102.4%	24.1
AR1	River Rd Washburn	mid depth	6:30	7	77.6%	20.4	13:45	8.5	101.5%	24.3
AR1a	Crouseville	mid depth	8:35	7.3	82.0%	21.1	13:30	8.5	102.3%	24.7
AR2	.5 mi above Rte 1, P. I.	mid depth	6:58	7.5	84.1%	21	14:30	9	110.9%	26
AR3	Maysville	mid depth	7:32	7.2	81.6%	21.5	14:01	13.4	162.2%	25
AR4	McGraw	0	9:05	10.6	124.0%	23.2	15:50	11.6	139.6%	24.7
		1		10.4	121.7%	23.2		11.6	139.1%	24.5
		2		10.3	120.1%	23		11.7	139.0%	24
AR5	Above Caribou Dam	0	8:44	9.2	108.9%	23.8	15:40	10	119.9%	24.5
		1		9.2	109.3%	24		10	119.9%	24.5
		2		9.2	109.3%	24		10	118.8%	24
		3		9.1	108.1%	24		9.5	112.4%	23.8
		4		9	106.5%	23.8		9.3	109.6%	23.6
AR6	Below Little Madaw. R	mid depth	7:37	8.9	97.9%	20	14:45	15.4	187.7%	25.4
AR7	Goodwin	mid depth	8:01	8.7	98.5%	21.5	15:03	16.5	202.3%	25.7
AR8	Stevensville	0	7:50	8.9	103.6%	22.9	9:36	11.3	135.2%	24.4
		1		8.9	103.6%	22.9		11.4	136.4%	24.4
AR9	Rte 1a Fort Fairfield	0	7:35	9.4	109.2%	22.8	14:45	11.9	143.7%	24.9
		1		9.5	110.3%	22.8		12	144.1%	24.6
		2		9.6	111.3%	22.7		12.5	147.9%	23.8
AR10	USA - Canada Border	0	7:15	9.2	108.7%	23.7	14:55	10.7	130.2%	25.3
		1		9.2	108.7%	23.7		11	133.6%	25.2
		2		9.3	110.1%	23.8		10.5	124.3%	23.8
		3		9.2	108.9%	23.8		10	118.1%	23.7
DUP-R (AR-1)	River Duplicate	mid depth	6:15	7.2	80.0%	20.5				

Major Tributaries

Presque Isle Stream

PIS0	Park St	mid depth	6:02	6.6	75.5%	22	14:55	8.7	106.3%	25.5
PIS8	Parson St Connector	mid depth	6:26	5.3	57.1%	19	14:50	12.6	155.3%	26
PIS13	Railroad Trestle	mid depth	6:38	5.1	55.0%	19	14:36	12.2	150.4%	26

Little Madawaska River

LM1	Bowles Rd	mid depth	7:01	8.8	92.8%	17.9	14:22	9.4	110.2%	23.3
LM2	Grimes Rd	mid depth	7:24	9	94.1%	17.5	14:37	10.9	128.5%	23.6

CS	Caribou Stream	mid depth	6:39	8.4	85.6%	16.3	14:08	9.8	116.8%	24.2
DUP-T (PIS0)	Tributary Duplicate	mid depth	6:10	6.6	75.5%	22				

Aroostook River Low Flow Survey

August 15, 2001

Station Code	Location	Depth (M)	Morning Sampling Run Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C	Afternoon Sampling Run Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C
AR0	Rte 11 Ashland	mid depth	7:30	7.5	82.0%	19.7	14:25	8.5	101.7%	24.4
AR0a	Ashland below	mid depth	7:40	7.3	79.8%	19.7	14:35	8.8	103.4%	23.4
AR1	River Rd Washburn	mid depth	6:17	7.3	78.7%	19	13:50	8.3	97.3%	23.3
AR1a	Crouseville	mid depth	6:40	6.9	75.6%	19.8	13:26	8.5	101.2%	24.1
AR2	.5 mi above Rte 1, P. I.	mid depth	7:11	8	88.0%	20	14:37	8.7	107.2%	26
AR3	Maysville	mid depth	7:43	8.2	90.2%	20	15:06	14.2	173.4%	25.5
AR4	McGraw	0	8:15	9.6	110.4%	22.3	15:08	12.4	149.8%	24.9
		1		9.6	110.4%	22.3		12.3	144.7%	23.5
		2		10	115.0%	22.3		11.5	134.1%	23
AR5	Above Caribou Dam	0	7:50	8.6	100.4%	23.1	14:55	10.9	132.1%	25.1
		1		8.6	100.6%	23.2		11	133.1%	25
		2		8.5	99.5%	23.2		10.8	128.3%	24
		3		8.6	100.6%	23.2		10.3	121.4%	23.6
		4		8.6	100.6%	23.2		9.8	115.1%	23.4
AR6	Below Little Madaw. R	mid depth	7:15	7.3	78.7%	19	14:25	15.4	185.7%	24.8
AR7	Goodwin	mid depth	7:47	7.7	84.3%	19.8	15:00	17.3	210.5%	25.3
AR8	Stevensville	0	6:57	9.1	103.3%	21.6	14:36	11.7	138.2%	23.7
		1		9.1	103.3%	21.6		11.8	139.6%	23.8
AR9	Rte 1a Fort Fairfield	0	6:45	9.4	108.3%	22.4	14:25	12.9	157.0%	25.3
		1		9.5	109.7%	22.5		13.7	161.8%	23.7
		2		9.5	109.7%	22.5		13.5	158.6%	23.4
AR10	USA - Canada Border	0	6:25	9.7	113.7%	23.3	14:08	13.5	162.8%	24.8
		1		9.7	113.7%	23.3		13.1	156.5%	24.3
		2		9.7	113.7%	23.3		11.8	139.1%	23.6
		3		9.7	113.7%	23.3				
DUP-R (AR5)	River Duplicate	0	8:03	8.9	104.1%	23.2				
		1		8.9	104.3%	23.3				
		2		8.8	103.2%	23.3				
		3		8.8	103.0%	23.2				
		4		8.7	101.8%	23.2				

Major Tributaries

Presque Isle Stream

PIS0	Park St	mid depth	6:04	6.9	76.6%	20.5	14:06	9	110.9%	26
PIS8	Parson St Connector	mid depth	6:30	5.8	61.3%	18	14:16	12.4	152.8%	26
PIS13	Railroad Trestle	mid depth	6:50	6	62.7%	17.5	14:26	12.2	150.4%	26

Little Madawaska River

LM1	Bowles Rd	mid depth	6:40	7.8	80.0%	16.6	13:58	9.9	113.9%	22.3
LM2	Grimes Rd	mid depth	7:00	8	81.4%	16.2	14:15	10.8	123.8%	22.1

CS	Caribou Stream	mid depth	6:18	7.4	78.2%	18	13:40	10.2	119.6%	23.3
DUP-T (PIS8)	Tributary Duplicate	mid depth	6:32	5.8	61.3%	18				

Aroostook River Low Flow Survey

August 16, 2001

Station Code	Location	Depth (M)	Morning Sampling Run Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C	Afternoon Sampling Run Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C
AR0	Rte 11 Ashland	mid depth	6:05	7.3	80.4%	20.1	14:10	8.6	100.6%	23.2
AR0a	Ashland below	mid depth	5:55	7.3	80.6%	20.2	14:20	8.8	103.4%	23.4
AR1	River Rd Washburn	mid depth	6:50	7.5	80.4%	18.7	13:40	8.6	101.2%	23.5
AR1a	Crouseville	mid depth	7:15	7	76.1%	19.4	13:30	8.8	103.6%	23.5
AR2	.5 mi above Rte 1, P. I.	mid depth	6:52	8.1	89.1%	20	14:31	8.7	105.3%	25
AR3	Maysville	mid depth	7:24	7.9	88.6%	21	14:08	14	169.4%	25
AR4	McGraw	0	8:15	10.5	120.8%	22.3	15:00	12.3	148.0%	24.7
		1		10.5	120.8%	22.3		11.7	138.7%	23.9
		2		10.4	119.4%	22.2		10.9	126.6%	22.8
AR5	Above Caribou Dam	0	7:55	9.9	116.1%	23.3	14:28	11.6	139.9%	24.8
		1		10	117.5%	23.4		11.4	136.7%	24.5
		2		10	117.5%	23.4		11	131.4%	24.3
		3		10	117.5%	23.4		10.9	130.0%	24.2
		4		8.1	94.8%	23.2				
AR6	Below Little Madaw. R	mid depth	7:22	7.5	82.2%	19.8	14:12	14.3	172.7%	24.9
AR7	Goodwin	mid depth	7:57	8.4	93.3%	20.5	14:21	19.2	234.9%	25.6
AR8	Stevensville	0	7:10	8.7	98.7%	21.6	15:11	13.1	155.6%	24
		1		8.6	97.8%	21.7		13.1	155.3%	23.9
AR9	Rte 1a Fort Fairfield	0	6:50	10.7	122.6%	22.1	15:00	14.1	169.4%	24.6
		1		10.7	122.6%	22.1		14	166.0%	23.9
		2		10.7	122.6%	22.1		14.3	168.6%	23.6
AR10	USA - Canada Border	0	6:25	10.2	118.7%	22.9	14:42	12.7	152.3%	24.5
		1		10.3	120.1%	23		13	155.3%	24.3
		2		10.3	120.1%	23		12.9	153.5%	24.1
		3		10.2	118.9%	23		12.6	149.4%	23.9
DUP-R (AR9)	River Duplicate	0	6:56	10.9	124.9%	22.1				
		1		10.9	125.1%	22.2				
		2		11	126.3%	22.2				

Major Tributaries

Presque Isle Stream

PIS0	Park St	mid depth	5:57	6.9	77.4%	21		9.3	115.7%	26.5
PIS8	Parson St Connector	mid depth	6:15	5.6	59.2%	18	14:51	13.1	161.5%	26
PIS13	Railroad Trestle	mid depth	6:30	5.9	62.3%	18	14:41	12	146.6%	25.5

Little Madawaska River

LM1	Bowles Rd	mid depth	6:40	7.8	81.2%	17.3	13:54	9.6	112.1%	23.1
LM2	Grimes Rd	mid depth	7:05	8.3	85.0%	16.5	14:04	11.2	129.3%	22.5
CS	Caribou Stream	mid depth	6:20	7.4	78.6%	18.3	13:40	10	117.7%	23.5
DUP-T (LM2)	Tributary Duplicate	mid depth	7:10	8.4	86.2%	16.6				

Aroostook River Intensive Survey

August 28-30, 2001

Flow (cfs)	USGS Washburn	AR6	PIS0	LM2	CS
28-Aug	117	177	3.8	29.3	3.9
29-Aug	130				
30-Aug	134				

Station Code	Location	Date	TSS ppm	VSS ppm	TP ppb	PO4-P ppb	TN ppm	NH3-N ppm	NO2-N ppm	$NO3\text{-}N_i$ ppm	$NO3\text{-}N_f$ ppm	Chl a ppb	TBODu ppm	CBODu ppm	NBODu ppm	BOD Kd /day	Secchi* (m)
AR0	Rte 11 Ashland	28-Aug	< 1	< 1	3.7	< 1	0.27	< .04	< .01	0.01	0.17	< 1	4.3	3.6	0.7	0.039	
		29-Aug	< 1	< 1	3.7	< 1	0.25	< .04	< .01	0.01	0.14	< 1	3.7	3.1	0.6	0.036	
		30-Aug	< 1	< 1	3.8	< 1	0.28	< .04	< .01	0.01	0.1	< 1	3.3	2.9	0.4	0.059	
AR0a	Ashland below	28-Aug	< 1	< 1	2.9	< 1	0.26	< .04	< .01	0.01	0.12	< 1	3.4	2.9	0.5	0.048	
		29-Aug	< 1	< 1	5.6	< 1	0.26	< .04	< .01	0.01	0.15	1.1	3.7	3.1	0.6	0.036	
		30-Aug	2	1.8	5.2	< 1	0.26	< .04	< .01	0.01	0.14	< 1	3.4	2.8	0.6	0.059	
AR1	River Rd Washburn	28-Aug	< 1	< 1	9.9	2.6	0.27	< .04	< .01	0.02	0.14	< 1	3.1	2.6	0.5	0.05	
		29-Aug	< 1	< 1	4.7	< 1	0.25	< .04	< .01	0.02	0.15	52	3.6	3.0	0.6	0.035	
		30-Aug	1.2	1	3.1	< 1	0.27	< .04	< .01	0.01	0.11	< 1	3.3	2.9	0.4	0.06	
AR1a	Crouseville	28-Aug	1.6	1.2	3.8	< 1	0.26	< .04	< .01	0.03	0.15	1.2	3	2.5	0.5	0.047	
		29-Aug	< 1	< 1	5.6	< 1	0.28	< .04	< .01	0.02	0.19	1.2	4.1	3.4	0.7	0.03	
		30-Aug	1	< 1	4	< 1	0.29	< .04	< .01	0.02	0.14	< 1	3.4	2.9	0.5	0.066	
AR2	.5 mi above Rte 1, P. I.	28-Aug	1	< 1	4.6	< 1	0.29	< .04	< .01	0.03	0.19	< 1	4.7	4.0	0.7	0.037	
		29-Aug	< 1	< 1	6.1	< 1	0.28	< .04	< .01	0.03	0.2	2.2	3.7	3.0	0.7	0.043	
		30-Aug	< 1	< 1	4.5	< 1	0.26	< .04	< .01	0.02	0.14	5.5	3.2	2.7	0.5	0.064	
AR3	Maysville	28-Aug	1.6	1.4	18	7.7	1.55	< .04	< .01	1.17	1.34	2.4	4	3.3	0.7	0.063	
		29-Aug	1.7	2.5	21	10	1.46	< .04	0.01	1.19	1.34	3.5	4.4	3.8	0.6	0.05	
		30-Aug	1	< 1	18	6.4	1.22	< .04	< .01	0.91	1.07	3.2	3.6	2.9	0.7	0.079	
AR4	McGraw	28-Aug	2.5	1.9	11	1.2	1.79	0.05	0.03	1.41	1.58	1	5	4.3	0.7	0.066	
		29-Aug	1	< 1	19	1.1	2.08	0.05	0.02	1.68	1.92	5	5.6	4.6	1.0	0.051	
		30-Aug	2.6	2.2	17	4.4	2.08	< .05	0.02	1.65	1.83	5.1	4.8	4.0	0.8	0.073	
AR5	Above Caribou Dam	28-Aug	2.3	1.9	14	< 1	1.01	< .04	0.01	0.6	0.85	4.8	4.9	3.8	1.1	0.06	2.5
		29-Aug	< 1	< 1	17	< 1	1.02	0.04	0.01	0.65	0.87	7.5	5	4.0	1.0	0.053	2.3
		30-Aug	1.6	1.2	17	< 1	1.09	< .04	0.01	0.66	0.97	9	5.8	4.5	1.3	0.061	
AR6	Below Little Madaw. R	28-Aug	2.9	2.1	87	57	1.05	< .04	0.01	0.76	0.98	6.9	4.4	3.4	1.0	0.064	
		29-Aug	1.8	1.6	74	48	1	< .04	0.01	0.67	0.95	6.6	4.8	3.6	1.2	0.063	
		30-Aug	1.6	1.4	68	43	1	< .04	< .01	0.61	0.81	7.5	4.3	3.4	0.9	0.077	
AR7	Goodwin	28-Aug	1.4	1.2	19	4	0.97	< .04	0.01	0.64	0.82	9.5	4.3	3.5	0.8	0.065	
		29-Aug	< 1	< 1	28	7.9	0.94	< .04	0.01	0.53	0.74	7	5	4.1	0.9	0.054	
		30-Aug	1.9	1.7	25	7.4	0.79	< .04	< .01	0.44	0.64	8.2	4.6	3.7	0.9	0.078	
AR8	Stevensville	28-Aug	1.9	1.7	20	4.5	0.97	< .04	0.01	0.62	0.84	8.6	4.7	3.7	1.0	0.058	
		29-Aug	1.2	1	25	5.8	0.96	< .04	0.01	0.55	0.79	6.1	5.1	4.1	1.0	0.059	
		30-Aug	1.4	1.2	22	6.1	0.83	< .04	< .01	0.45	0.62	8.2	4.5	3.8	0.7	0.077	
AR9	Rte 1a Fort Fairfield	28-Aug	1	< 1	58	43	0.84	< .04	0.01	0.48	0.71	5.2	4.4	3.4	1.0	0.064	
		29-Aug	1.2	< 1	23	11	0.88	< .04	0.01	0.45	0.66	6.1	5.1	4.2	0.9	0.054	
		30-Aug	1.4	1	31	15	0.73	< .04	< .01	0.35	0.54	6.1	4.8	4.0	0.8	0.075	
AR10	USA - Canada Border	28-Aug	2.8	1.9	28	15	1.06	0.04	0.02	0.66	0.94	3.6	5.2	4.0	1.2	0.054	>2.1
		29-Aug	1	< 1	46	16	1.03	0.04	0.01	0.55	0.88	5.3	5.8	4.4	1.4	0.056	>2.4
		30-Aug	2.4	2.2	39	19	0.77	< .04	0.01	0.37	0.59	3.9	4.9	3.9	1.0	0.075	
PIS8 AR10 AR9	River Duplicate	28-Aug	2.8	2.1	88	34	1.36	0.09	0.01	0.89	1.16	4.1	8	6.8	1.2	0.049	
		29-Aug	1.2	1	43	17	1.02	0.04	0.02	0.54	0.81	5.5	5.6	4.4	1.2	0.049	
		30-Aug	< 1	< 1	33	12	0.73	< .04	0.01	0.35	0.62	5.5	6.2	5.0	1.2	0.057	

* Secchi depth readings were only taken in impoundments where there was adequate depth.

$NO3\text{-}N_i$ = Nitrate-N reading at start of BOD test

$NO3\text{-}N_f$ = Nitrate-N reading at end of BOD test

Aroostook River Intensive Survey

August 28-30, 2001

Major Tributaries

Station Code	Location	Date	TSS ppm	VSS ppm	TP ppb	PO4-P ppb	TN ppm	NH3-N ppm	NO2-N ppm	$NO3\text{-}N_i$ ppm	$NO3\text{-}N_f$ ppm	Chl a ppb	TBODu ppm	CBODu ppm	NBODu ppm	BOD Kd /day	Flow (cfs)
Presque Isle Stream																	
PIS0	Park St	28-Aug	13	3.1	13	< 1	0.53	0.04	< .01	0.09	0.32	3	7.8	6.8	1.0	0.037	3.8
		29-Aug	1.9	1.7	40	1.3	0.69	0.04	< .01	0.17	0.46	5	8.4	7.1	1.3	0.054	
		30-Aug	6.5	3.3	34	2.7	0.7	0.04	< .01	0.2	0.43	5.2	6.5	5.5	1.0	0.063	
PIS8	Parson St Connector	28-Aug	4.4	1.9	120	35	1.38	0.09	0.01	0.87	1.12	4.1	7.8	6.7	1.1	0.047	
		29-Aug	7.2	4	93	6.6	0.72	< .04	< .01	0.18	0.5	3.6	11.3	9.9	1.4	0.078	
		30-Aug	6	2.8	36	4.4	0.69	< .04	< .01	0.23	0.43	5.3	5.4	4.5	0.9	0.065	
PIS13	Railroad Trestle	28-Aug	5.1	2.9	61	5.1	1.61	0.08	0.02	1.22	1.41	2.4	16.3	15.5	0.8	0.075	
		29-Aug	9.8	3.1	67	17	0.63	< .04	< .01	0.19	0.44	7	8.1	7.0	1.1	0.043	
		30-Aug	7.4	2.4	41	7.7	0.66	< .04	< .01	0.21	0.41	5	5.3	4.4	0.9	0.063	
Little Madawaska River																	
LM1	Bowles Rd	28-Aug	1.6	1.4	4.8	< 1	0.63	< .04	< .01	0.43	0.58	1.4	3.3	2.7	0.6	0.059	
		29-Aug	< 1	< 1	6.5	< 1	0.67	< .04	< .01	0.4	0.55	3.9	4	3.4	0.6	0.048	
		30-Aug	< 1	< 1	5.7	< 1	0.62	< .04	< .01	0.36	0.46	2.2	2.4	2.0	0.4	0.038	
LM2	Grimes Rd	28-Aug	1.5	1.5	6.4	< 1	0.99	< .04	< .01	0.82	0.96	4.8	2.9	2.3	0.6	0.063	29.3
		29-Aug	1.4	1	6.8	< 1	0.96	< .04	< .01	0.71	0.84	3.2	3.5	2.9	0.6	0.067	
		30-Aug	< 1	< 1	9.6	1.3	0.9	< .04	< .01	0.63	0.77	3.3	3	2.4	0.6	0.083	
CS	Caribou Stream	28-Aug	1.9	1.6	9.4	< 1	0.85	0.06	0.01	0.47	0.76	1.6	4.4	3.1	1.3	0.072	3.9
		29-Aug	< 1	< 1	11	< 1	0.76	< .04	0.01	0.48	0.81	2.9	5.3	3.9	1.4	0.046	
		30-Aug	< 1	< 1	10	< 1	0.78	< .04	0.01	0.46	0.65	2.8	5.6	4.8	0.8	0.114	
LM1 AR3 CS	Tributary Duplicate	28-Aug	< 1	< 1	3.6	< 1	0.65	< .04	< .01	0.42	0.58	1.4	3	2.3	0.7	0.055	
		29-Aug	< 1	< 1	20	9	1.49	< .04	0.01	1.22	1.34	< 1	4.7	4.2	0.5	0.059	
		30-Aug									0.62		4.1	1.4	2.7	0.093	

$NO3\text{-}N_i$ = Nitrate-N reading at start of BOD test

$NO3\text{-}N_f$ = Nitrate-N reading at end of BOD test

Aroostook River Intensive Survey

August 26-30, 2001 (Sun - Thurs)

Numbers in **boldface** indicate treatment facility data

Effluents

Station Code	Location	Date	TSS ppm	VSS ppm	TP ppb	PO4-P ppb	TN ppm	NH3-N ppm	NO2-N ppm	$NO3\text{-}N_i$ ppm	$NO3\text{-}N_f$ ppm	Chl a ppb	BOD5 ppm	TBODu ppm	CBODu ppm	NBODu ppm	Flow (mgd)
ASH	Ashland	26-Aug	5.1	4.9	1500	492	3.18	0.4	0.03	0.05	2.2	140	11	33	24	9	**0.047**
		27-Aug	5.2	5	4100	513	3.39	0.63	0.03	0.04	2.6	160	12	43	32	11	**0.045**
		28-Aug	3.8	3.6	1400	526	3.78	0.53	0.05	0.07	2.5	1.1	9	40	29	11	**0.086**
		29-Aug															**0.082**
		30-Aug											**11**				**0.070**
WAS	Washburn	26-Aug	64	63.6	6500	2975	3.33	0.64	0.73	1.4	4.6		15	125	111	14	**0.036**
		27-Aug	94	93.3	6800	2980	11.9	0.35	0.99	1.61	6.4	730	17	166	145	21	**0.029**
		28-Aug	86	82.6	7000	2895	10.6	0.34	0.88	1.44	5.6	470	15	164	146	18	**0.046**
		29-Aug															**0.042**
		30-Aug															**0.031**
PRI	Presque Isle	26-Aug	2.7	2.5	480	126 **160**	8.59	0.07	< .01	7.2	6.9	1	1.6 **3**	9	9.0	0.0	**0.948**
		27-Aug	4.7	2.9	420	122 **150**	3.77	**0.04** 0.24	< .01	4.76	5.1	< 1	3 **4**	11	9.5	1.5	**1.218**
		28-Aug	4.6	3.3	550	**170** 123	2.49	**0.05** 0.25	< .01	2.5	3.1	1.1	3 **2**	9.7	7.1	2.6	**1.614**
		29-Aug						**0.05**					3				**1.174**
		30-Aug											**3**				**1.263**
MCC	McCain Foods	26-Aug	100	49	28000	4875	133	< .04	< .01	106	100	5.2	11 / **3**	39	39	0.0	**1.567**
		27-Aug	11	6.8	28600	4065	138	0.04	0.03	91.1	96	1.8	3 / **13**	14	14.0	0.0	**1.662**
		28-Aug	4.5	4.1	6400	3150	113	0.06	0.02	94.8	94	12	2 / **2**	12	12.0	0.0	**1.898**
		29-Aug											**3**				**2.152**
		30-Aug											**4**				**2.140**
CAR	Caribou	26-Aug	23	19.7	18000	9480	13.8	0.05	0.03	11.8	12	160	15	32	31	1	**0.56**
		27-Aug	22	19.5	27000	9480	15.2	0.08	0.05	12.4	13	140	16	40	37	3	**0.579**
		28-Aug	18	13.5	26000	10000	14.9	0.07	0.04	11.8	12	210	12 / **18**	35	34	1	**0.621**
		29-Aug											**21**				**0.611**
		30-Aug											**16**				**0.595**
LOR	Loring	26-Aug	< 1	< 1	1800	678	6.04	0.04	0.07	4.62	4.4	2.6	1.8	5.3	5.3	0.0	**0.278**
		27-Aug	< 1	< 1	2300	661	5.18	0.05	0.06	4.27	4.4	< 1	1.1	5.2	4.6	0.6	**0.348**
		28-Aug	1.2	< 1	1900	595	5.09	0.05	0.06	4.41	2.8	< 1	1.4	5.9	5.9	0.0	**0.412**
		29-Aug											1.6				**0.365**
		30-Aug											**1.9**				**0.327**
FTF	Fort Fairfield	26-Aug	13	12.5	9500	4800	25.6	0.44	0.41	20.4	23	2.4	17 / **20**	36	25	11	**0.376**
		27-Aug	12	10	3800 **18000**	**17000** 1685	19.8	0.78	0.53	18.2	18	2	16 **15**	40	40	0	**0.369**
		28-Aug	12	9.8	44000 **17000**	**16000** 24050	20.6	1.71	0.58	15.8	20	3.6	19 **20**	57	39	18	**0.379**
		29-Aug			**17000**	**16000**							15				**0.399**
		30-Aug											**26**				**0.358**
ASH MCC PRI	Effluent Duplicate	26-Aug	4.7	4.7	1500	494	3.3	0.4	0.03	0.05		160					
		27-Aug	20	10.6	26000	4010	142	0.04	0.03	102		1.4					
		28-Aug	4.4	4	530	124	4.88	0.23	< .01	2.52	3	< 1		9	6.9	2.1	
		29-Aug															
		30-Aug															

$NO3\text{-}N_i$ = Nitrate-N reading at start of BOD test

$NO3\text{-}N_f$ = Nitrate-N reading at end of BOD test

Aroostook River Dry Weather Tributary Survey
August 27, 2001

Station Code	Location	Depth (M)	Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C	TSS ppm	VSS ppm	TP ppb	PO4-P ppb
t-SCS	St Croix Str Rte 11	mid depth	7:02	7.4	79.8%	19	< 1	< 1	7.2	< 1
t-SPS	Squa Pan Str Rte 11	mid depth	6:45	8.1	85.4%	17.9	< 1	< 1	5.6	< 1
t-MR	Machias R Garfield Rd	mid depth	6:25	7.1	75.2%	18.1	< 1	< 1	4.9	< 1
t-LMR	L Machias R, Rte 11	mid depth	6:15	7.8	81.4%	17.4	< 1	< 1	10	< 1
t-AB	Alder Brook Ashland	mid depth	7:45	6.1	60.8%	15.2	1.8	1.6	17	< 1
t-GAB	Gardner Brook, Wade	mid depth	8:50	8.7	85.7%	14.7	< 1	< 1	2.7	< 1
t-SB	Salmon Brook Washburn	mid depth	8:27	8.3	83.2%	15.5	2.2	1.7	8.6	1.7
t-CB	Clayton Brook Washburn	mid depth	8:10	6.6	65.0%	14.7	2.1	1.9	19	3.3
t-NBP	North Branch P. I. Str in Mapleton	mid depth	8:19	7.8	78.5%	15.7	7.1	4.7	40	< 1
t-MB	Merritt Brook	mid depth	6:06	9.9	95.6%	13.8	2.2	1.5	15	4.9
t-HB	Hardwood Brook Maysville	mid depth	7:42	9.4	92.4%	14.6	1	< 1	6.9	< 1
t-PB	Prestile Brook Caribou	mid depth	7:29	9.5	93.8%	14.8	3	2.6	30	18
t-CS	Caribou Str Caribou	mid depth	7:16	7.4	78.0%	17.9	1.8	1.8	16	< 1
t-OB	Otter Brook Caribou	mid depth	7:07	9	88.5%	14.6	1	< 1	7.3	2.2
t-GRB	Gray Brook Fort Fairfield	mid depth	6:46	10.2	92.9%	11.2	< 1	< 1	21	12
t-HHB	Hockenhull Bk. Fort Fairfield	mid depth	6:32	8.2	81.8%	15.3	4.5	3.2	28	6.1

Aroostook River Low Flow Survey

August 28, 2001

Station Code	Location	Depth (M)	Morning Sampling Run Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C	Afternoon Sampling Run Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C
AR0	Rte 11 Ashland	mid depth	6:50	8.1	87.1%	18.9	14:15	8.9	103.0%	22.6
AR0a	Ashland below	mid depth		8.1	86.8%	18.7	14:25	9.4	107.7%	22.1
AR1	River Rd Washburn	mid depth	6:03	8.3	88.0%	18.2	13:45	9.2	104.8%	21.8
AR1a	Crouseville	mid depth	6:15	8	85.4%	18.5	13:30	9.8	111.0%	21.5
AR2	.5 mi above Rte 1, P. I.	mid depth	6:56	8	85.4%	18.5	14:38	9.5	112.9%	24
AR3	Maysville	mid depth	7:24	7.5	79.2%	18	14:14	13.4	153.3%	22
AR4	McGraw	0	8:27	8.5	92.2%	19.3	14:54	9.7	107.7%	20.5
		1		8	86.6%	19.2		9.5	105.1%	20.3
		2		7.9	85.5%	19.2		9	98.4%	19.7
AR5	Above Caribou Dam	0	8:10	9.1	100.9%	20.4	14:40	10	113.3%	21.5
		1		9.1	100.9%	20.4		10	113.3%	21.5
		2		9.1	101.1%	20.5		10	113.0%	21.4
		3		9.1	101.1%	20.5		10	112.2%	21
		4		9.1	100.9%	20.4		9.8	109.1%	20.6
AR6	Below Little Madaw. R	mid depth	6:42	7.6	80.6%	18.2	14:13	13.3	154.7%	22.9
AR7	Goodwin	mid depth	8:08	8.4	88.7%	18	14:57	19.2	224.7%	23.2
AR8*	Stevensville	0	7:15	7.5	79.5%	18.2	14:42	14	159.5%	21.8
		1		7.4	78.5%	18.2				
AR9*	Rte 1a Fort Fairfield	0	6:42	8.7	93.2%	18.7	14:15	12.6	141.9%	21.2
		1		8.3	88.9%	18.7		13.6	152.0%	20.8
		2								
AR10*	USA - Canada Border	0	6:30	10.2	111.7%	19.8	14:02	10.7	119.8%	20.9
		1		10.2	111.7%	19.8		10.7	119.6%	20.8
		2		10.2	111.7%	19.8		10.5	116.2%	20.3
		3								

* Tinker Dam Impoundment drawn down 3-4 feet at these sites

Major Tributaries

Presque Isle Stream

PIS0	Park St	mid depth	6:03	6.9	75.1%	19.5	15:03	9.6	114.0%	24
PIS8	Parson St Connector	mid depth	6:18	5.8	61.3%	18	14:57	13.4	162.2%	25
PIS13	Railroad Trestle	mid depth	6:33	5.7	60.2%	18	14:49	12.6	152.5%	25

Little Madawaska River

LM1	Bowles Rd	mid depth	7:15	8.4	86.0%	16.5	13:45	10.5	117.1%	20.7
LM2	Grimes Rd	mid depth	6:53	8.6	87.7%	16.3	14:05	11.8	132.4%	21

CS	Caribou Stream	mid depth	7:46	8.1	84.7%	17.5	13:56	10.4	117.8%	21.5
DUP-T (PIS8)	Tributary Duplicate	mid depth	6:24	5.9	62.3%	18				
DUP-T (LM1)	Tributary Duplicate	mid depth	7:22	8.5	87.0%	16.5				

Aroostook River Low Flow Survey

August 29, 2001

Station Code	Location	Depth (M)	Morning Sampling Run Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C	Afternoon Sampling Run Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C
AR0	Rte 11 Ashland	mid depth	7:15	8.3	89.7%	19.1	14:20	9	101.9%	21.5
AR0a	Ashland below	mid depth	7:35	8.1	88.4%	19.6	14:30	9.2	103.8%	21.3
AR1	River Rd Washburn	mid depth	6:35	7.9	86.4%	19.7	13:43	8.8	99.5%	21.4
AR1a	Crouseville	mid depth	6:00	7.6	83.8%	20.1	13:30	9.3	105.3%	21.5
AR2	.5 mi above Rte 1, P. I.	mid depth	7:05	8.3	89.5%	19	14:10	9.4	107.5%	22
AR3	Maysville	mid depth	7:34	7.7	84.7%	20	13:47	12.8	143.6%	21
AR4	McGraw	0	8:20	9.3	101.7%	19.7	14:53	10.6	118.0%	20.6
		1		9.3	101.7%	19.7		10.6	118.0%	20.6
		2		9.2	100.6%	19.7		10.6	118.0%	20.6
AR5	Above Caribou Dam	0	7:50	8.8	97.7%	20.5	14:30	9.6	107.3%	20.8
		1		8.8	97.9%	20.6		9.6	107.3%	20.8
		2		8.8	97.9%	20.6		9.6	107.3%	20.8
		3		8.8	97.9%	20.6		9.6	107.1%	20.7
		4		8.4	93.3%	20.5		9.5	105.9%	20.7
AR6	Below Little Madaw. R	mid depth	6:25	6.8	73.7%	19.3	15:37	16.2	182.4%	21.2
AR7	Goodwin	mid depth	6:56	6.9	74.7%	19.2	15:20	16.2	182.1%	21.1
AR8*	Stevensville	0	7:30	7.5	82.2%	19.8	15:00	13.8	154.8%	21
		1								
AR9*	Rte 1a Fort Fairfield	0	6:31	10.9	120.1%	20.1	14:20	14.3	161.3%	21.3
		1		10.4	114.2%	19.9		14.6	164.7%	21.3
		2								
AR10*	USA - Canada Border	0	6:12	10.4	114.6%	20.1	14:05	10.6	117.3%	20.3
		1		10.4	114.8%	20.2		10.7	118.4%	20.3
		2		10.4	114.8%	20.2		10.8	119.3%	20.2
		3								
DUP-R (AR3)	River Duplicate	mid depth		7.7	84.7%	20				
DUP-R (AR10)	River Duplicate	0	6:19	10.4	114.8%	20.2				
		1		10.4	114.8%	20.2				
		2		10.4	114.8%	20.2				

* Tinker Dam Impoundment drawn down 2-3 feet at these sites

Major Tributaries

Presque Isle Stream

PIS0	Park St	mid depth	6:05	7.7	84.7%	20	14:35	8.6	97.4%	21.5
PIS8	Parson St Connector	mid depth	6:23	6.8	73.3%	19	14:28	10.8	123.5%	22
PIS13	Railroad Trestle	mid depth	6:48	6.9	74.4%	19	14:21	10.8	123.5%	22

Little Madawaska River

LM1	Bowles Rd	mid depth	7:03	7.8	81.7%	17.6	14:00	10	108.9%	19.5
LM2	Grimes Rd	mid depth	6:45	7.9	82.8%	17.6	15:49	11.8	130.0%	20.1
CS	Caribou Stream	mid depth	8:04	8.5	89.8%	18	13:25	10.2	112.2%	20

Aroostook River Low Flow Survey

August 30, 2001

			Morning Sampling Run				Afternoon Sampling Run			
Station Code	Location	Depth (M)	Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C	Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C
AR0	Rte 11 Ashland	mid depth	6:30	8.1	85.6%	18	14:10	8.2	92.5%	21.3
AR0a	Ashland below	mid depth	6:10	8.8	92.4%	17.7	14:20	9	101.0%	21
AR1	River Rd Washburn	mid depth	7:00	8.3	84.3%	16.1	13:43	8.8	96.8%	20
AR1a	Crouseville	mid depth	7:15	7.7	79.7%	17	13:30	8.8	97.7%	20.5
AR2	.5 mi above Rte 1, P. I.	mid depth	6:45	8.8	90.1%	16.5	14:00	9.5	108.6%	22
AR3	Maysville	mid depth	7:17	8.4	86.9%	17	13:38	13.8	153.3%	20.5
AR4	McGraw	0	7:49	9.8	106.7%	19.5	14:55	10.8	119.7%	20.4
		1		9.6	104.3%	19.4		11.6	128.6%	20.4
		2		9.7	105.4%	19.4		12.1	133.3%	20.1
AR5	Above Caribou Dam	0	7:30	8.9	97.9%	20	14:45	9	100.6%	20.8
		1		9	99.0%	20		10.5	117.1%	20.7
		2		9	99.2%	20.1		12.6	140.2%	20.6
		3		8.9	98.1%	20.1		13.2	146.0%	20.3
		4		9	99.2%	20.1		12.1	133.3%	20.1
AR6	Below Little Madaw. R	mid depth	6:20	7.8	78.5%	15.7	13:48	14.7	164.9%	21
AR7	Goodwin	mid depth	7:57	9.4	96.7%	16.7	15:02	15	169.6%	21.4
AR8*	Stevensville	0	7:31	9.1	94.5%	17.2	14:25	14.1	156.0%	20.3
		1								
AR9*	Rte 1a Fort Fairfield	0	6:43	12.2	130.2%	18.5	14:12	14.9	166.8%	20.9
		1		12	127.8%	18.4		15.6	174.3%	20.8
		2								
AR10*	USA - Canada Border	0	6:23	10.3	111.0%	19	13:42	10	110.6%	20.3
		1		10.3	111.0%	19		10	110.6%	20.3
		2		10.3	111.0%	19		10	110.2%	20.1
		3		10.2	110.0%	19				
DUP-R (AR9)	River Duplicate	0	7:40	12.1	128.9%	18.4				
		1		12	127.8%	18.4				

* Tinker Dam Impoundment drawn down 3-4 feet at these sites

Major Tributaries

Presque Isle Stream

PIS0	Park St	mid depth	6:00	7.4	78.2%	18	14:35	8.7	98.5%	21.5
PIS8	Parson St Connector	mid depth	6:16	7.5	77.6%	17	14:22	10.9	127.1%	23
PIS13	Railroad Trestle	mid depth	6:26	7.7	78.8%	16.5	14:10	11	128.2%	23

Little Madawaska River

LM1	Bowles Rd	mid depth	7:00	8.7	83.9%	13.7	14:08	12.4	133.4%	18.9
LM2	Grimes Rd	mid depth	6:40	9	86.4%	13.5	13:55	11.2	120.0%	18.7

CS	Caribou Stream	mid depth	7:46	8.9	90.2%	16	13:17	10.4	114.4%	20
DUP-T (CS)	Tributary Duplicate	mid depth	7:47	8.9	90.2%	16				

Aroostook River Single Day Surveys

			26-Jun				03-Jul				12-Jul				8-Aug to 9-Aug			
Station Code	Location	Depth (M)	Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C	Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C	Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C	Date-Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C
AR0	Rte 11 Ashland	Surface	5:45	8.9	95.9%	19.1	11:45	9	95.5%	18.2	6:06	8.8	95.4%	19.3	8-5:20	6.7	71.8%	18.7
AR0a	Ashland below	Surface	6:00	8.8	94.7%	18.9	11:30	9.1	96.1%	18	6:14	8.8	95.6%	19.4	8-5:30	5.7	65.1%	21.9
AR1	River Rd Washburn	Surface	6:45	8.9	95.9%	19	11:00	8.8	90.7%	16.8	7:20	7.5	82.3%	19.9	8-6:10	6.9	72.1%	17.5
AR1a	Crouseville	Surface	8:26	8	90.8%	21.6	9:45	9.5	98.3%	17	7:45	7.8	86.6%	20.5	8-6:32	6.1	65.6%	18.9
AR2	.5 mi above Rte 1, P. I.	Surface	8:38	7.6	87.8%	22.5	9:18	9.6	99.3%	17	7:55	7.8	86.3%	20.3	8-6:47	5.5	62.9%	22
AR3	Maysville	Surface	9:10	8.6	102%	23.9	8:30	9.4	95.2%	16	8:40	8.9	98.5%	20.3	9-7:45	7	80.4%	22.2
AR4	McGraw	Surface	9:27	8.6	103%	24.3	8:06	8.9	95.9%	19	8:55	8.4	93.1%	20.4	9-7:28	7.6	85.2%	21
AR5	Above Caribou Dam	Surface	9:43	8.7	105%	25	7:49	8	86.9%	19.4	9:35	7.8	87.0%	20.7	9-7:16	7	82.2%	23.4
AR6	Below Little Madaw. R	Surface	10:15	10.8	125%	22.6	6:48	9	92.7%	16.8	10:38	9.6	105%	19.6	9-6:58	8	88.3%	20.2
AR7	Goodwin	Surface	10:38	11	128%	23	6:29	8.8	89.9%	16.4	10:59	10	112%	20.7	9-6:43	7.5	85.0%	21.5
AR8	Stevensville	Surface	10:50	10.9	126%	22.6	6:10	8.9	91.1%	16.5	11:38	9.8	109%	20.5				
AR9	Rte 1a Fort Fairfield	Surface	11:15	9.7	114%	23.2	5:58	9.6	98.3%	16.5	11:09	8.8	98.9%	21.1	9-6:30	7	80.2%	22.1
AR10	USA - Canada Border	Surface	12:00	7.8	92.1%	23.7	5:30	9.2	95.4%	17.1	11:20	9.6	109%	21.6	9-6:18	7.3	83.5%	22

Major Tributaries

Presque Isle Stream

PIS0	Park St	Surface	8:30	7.9	91.6%	22.7	12:40	9.5	106%	20.9	8:09	7.9	87.4%	20.3				
PIS8	Parson St Connector	Surface	8:20	7.8	89.2%	22	12:30	10.3	114%	20.5	8:02	9	99.2%	20.1	8-7:10	6.5	72.3%	20.6
PIS13	Railroad Trestle	Surface	8:40	7.9	90.7%	22.2	12:40	8.1	89.3%	20.1	7:55	9.2	101%	19.9				

Little Madawaska River

LM1	Bowles Rd	Surface	10:40	8.8	96.4%	19.8	6:20	9.5	92.6%	14.2	10:25	9.6	102%	18.4	9-6:52	7.2	78.1%	19.3
LM2	Grimes Rd	Surface	10:59	8.6	92.7%	19	6:48	9.6	96.2%	15.5	10:10	9.8	104%	18.2				

CS	Caribou Stream	mid depth			0.0%				0.0%				0.0%		9-7:10	6.8	76.0%	20.8

Aroostook River Single Day Surveys
Minor Tributaries

			26-Jun				03-Jul				12-Jul				8-Aug to 9-Aug			
Station Code	Location	Depth (M)	Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C	Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C	Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C	Date-Time	D. O. (ppm)	D. O. (% Sat.)	Temp °C
t-SCS	St Croix Str Rte 11	mid depth	6:00	6.1	65.0%	18.4	11:38	9.6	98.3%	16.5	5:20	7.6	79.9%	17.8				
t-SPS	Squa Pan Str Rte 11	mid depth	6:20	8.2	85.2%	17.2	11:20	10	108%	19.1	5:37	8.7	90.8%	17.4				
t-MR	Machias R Garfield Rd	mid depth	6:39	7.9	85.9%	19.4	11:05	10	101%	16	5:53	8.4	88.9%	18.1				
t-LMR	L Machias R, Rte 11	mid depth	6:50	7.8	83.7%	18.8	10:49	9.5	98.3%	17	5:59	7.9	83.8%	18.2				
t-AB	Alder Brook Ashland	mid depth	7:30	8	81.9%	16.5	10:28	8.1	78.3%	13.8	6:23	8.6	86.2%	15.5				
t-GAB	Gardner Brook, Wade	mid depth	8:10	8.2	84%	16.4	9:36	8.6	86.8%	15.8	7:40	8.5	85.8%	15.8				
t-SB	Salmon Brook Washburn	mid depth	7:50	7.8	84%	18.8	9:15	8.8	89.0%	15.9	7:31	7.8	82.6%	18.1	8-:620	4.6	50.4%	19.8
t-CB	Clayton Brook Washburn	mid depth	8:10	7.1	72%	16.1	12:26	7.6	19.8%	15.2	7:15	9	90.2%	15.5				
t-NBP	North Branch P. I. Str in Mapleton	mid depth	5:16	5.9	65%	20.1	12:10	8.4	85.1%	16	6:43	7.1	75%	17.7				
t-MB	Merritt Brook	mid depth	5:00	6.5	69%	18.1	12:48	8.7	88.7%	16.3	4:40	8	76%	13.2	9-5:40	8.1	80.7%	15.2
t-HB	Hardwood Brook Maysville	mid depth	10:09	8.9	94%	18	8:15	9	86.4%	13.5	8:30	10.5	107%	16.2	9-7:41	7.6	77.8%	16.5
t-PB	Prestile Brook Caribou	mid depth	10:29	9.1	96%	17.9	7:55	10.1	96.7%	13.4	9:20	9.5	96.9%	16.3				
t-CS	Caribou Str Caribou	mid depth	10:48	8.2	94.5%	22.4	7:20	9	90.4%	15.6	9:45	8.6	93%	19.3	9-7:10	6.8	76.0%	20.8
t-OB	Otter Brook Caribou	mid depth	11:12	7.6	82.6%	19.4	6:35	9.5	89.0%	12.4	9:54	9.2	94%	16.6				
t-GRB	Gray Brook Fort Fairfield	mid depth	11:48	10.4	99.6%	13.4	6:00	11.2	98%	9.5	10:48	11.1	105%	13	9-6:41	9	82.0%	11.2
t-HHB	Hockenhull Bk. Fort Fairfield	mid depth	12:10	10.8	117%	19.2	5:45	10.8	112%	17.3	11:10	10.2	102%	15.2				