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Appendix 1. Stand characteristics of studied sites.

Site	Buffer width	Time since harvested	Direction of edge	Slope m/10m	Peat, cm	Average stand age, years	Average diameter, cm	Average Stand height, m	Stand volume m3/ha
Site 1	39	28	130	1	20	80	26	23	294
Site 2	6	5	160	0.5	0	90	27	23	192
Site 3	48	20	250	1	0	80	27	22	154
Site 4	18	25	210	1	10	100	30	25	255
Site 5	18	35	230	1	30	86	27	24	223
Site 6	0	25	80	1	10				
Site 7	0	26	230	0	20				
Site 8	19	2	120	2	20	100	35	30	158
Site 9	17	8	250	2	5	81	26	24	267
Site 10	13	28	80	1.5	10	78	24	18	182
Site 11	2	12	250	2	0	100	35	30	158
Site 12	16	1	220	1	0	80	24	20	200
Site 13	1	5	210	0.5	0				
Site 14	12	18	80	1	0	80	22	19	224
Site 15	1	3	190	0.5	10				
Site 16	50	3	200	0.5	10	85	27	22	244
Site 17	8	16	310	0	0	80	24	18	183
Site 18	2	24	70	0.5	0	90	27	23	192
Site 19	0	30	80	1.5	15				
Site 20	5	29	110	1.5	0	81	23	22	191
Site 21	37	1	190	1.5	0	85	27	22	244
Site 22	28	19	80	1	0	100	26	21	223
Site 23	3	4	210	0	10	113	31	24	331
Site 24	36	0	80	0.5	15	100	30	23	253
Site 25	27	6	110	0.5	0	100	26	21	223
Site 26	17	9	250	0.5	10	99	27	23	338
Site 27	28	25	210	0.5	0	80	29	24	345
Site 28	1	4	250	1	10				
Site 29	41	21	110	0.5	30	85	26	21	216
Site 30	24	30	220	0.5	0	113	30	23	331
Site 31	0	18	260	1.5	10				
Site 32	13	5	310	0.5	30	100	26	20	243
Ref. 1	125	84	190	1.5	0	84	20	17	200
Ref. 2	169	79	210	0.5	10	79	23	19	301
Ref. 3	315	105	250	0.5	20	105	22	18	231
Ref. 4	210	67	120	1.5	0	67	25	19	258
Ref. 5	125	109	220	1	0	139	21	18	197
Ref. 6	200	96	170	2	0	96	21	18	233
Ref. 7	185	80	120	0.5	10	80	24	21	351

Appendix 2. Test statistics between managed and unmanaged reference sites: i) T-test for equality of habitat and stand characteristic means; ii) Mardia-Watson-Wheeler test for equal directional distribution (i.e. direction of edge in managed sites and direction of sample lines in unmanaged reference sites); iii) Pearson correlation between independent variables used in regression analysis.

i)	t-test				
	MD	SE	df	t	p
Slope m/10m	-0.181	0.238	37	-0.758	0.453
Peatlayer thickness, m	0.029	0.039	37	0.733	0.468
Average stand age, yr	-2.217	6.156	30	-0.36	0.721
Average diameter cm (1.3m)	4.962	1.276	30	3.888	0.001
Average stand height, m	3.989	1.132	30	3.522	0.001
Tree stand volume	19.112	24.556	30	-0.778	0.442

ii)	Mardia-Watson-Wheeler test			
	Site mean	Reference Mean	W	p
Direction	185.36	184.05	2.3842	0.30359

iii)	Pearson Correlation		
	N	R	p
Time vs. width	32	-0.071	0.698

Appendix 3. Optimum distance (meters) of vascular plant species from the stream. Optimum distances are based on weighted averaging. Data is from the unmanaged reference sites.

Plant species	Optimum
<i>Pyrola minor</i>	1
<i>Pyrola rotundifolia</i>	1
<i>Carex acuta</i>	2
<i>Scutellaria galericulata</i>	2
<i>Peucedanum palustre</i>	2
<i>Matteuccia struthiopteris</i>	2
<i>Potentilla palustris</i>	2
<i>Lysimachia vulgaris</i>	2
<i>Lysimachia thyrsoflora</i>	3
<i>Epilobium palustre</i>	3
<i>Moneses uniflora</i>	3
<i>Phalaris arundinacea</i>	3
<i>Caltha palustris</i>	3
<i>Callitriche palustris</i>	4
<i>Valeriana sambucifolia</i>	4
<i>Filipendula ulmaria</i>	4
<i>Rubus arcticus</i>	5
<i>Cardamine amara</i>	5
<i>Galium palustre</i>	5
<i>Carex canescens</i>	6
<i>Viola palustris</i>	6
<i>Phegopteris connectilis</i>	6
<i>Agrostis canina</i>	6
<i>Calamagrostis purpurea</i>	6
<i>Athyrium filix-femina</i>	6
<i>Angelica sylvestris</i>	6
<i>Deschampsia cespitosa</i>	7
<i>Carex disperma</i>	7
<i>Geum rivale</i>	7
<i>Ranunculus repens</i>	7
<i>Paris quadrifolia</i>	7
<i>Equisetum sylvaticum</i>	7
<i>Melampyrum pratense</i>	7
<i>Veronica chamaedrys</i>	8
<i>Oxalis acetosella</i>	8
<i>Crepis paludosa</i>	8
<i>Orthilia secunda</i>	8
<i>Carex globularis</i>	8
<i>Trientalis europaea</i>	8
<i>Dryopteris carthusiana</i>	8
<i>Convallaria majalis</i>	8
<i>Luzula pilosa</i>	8

<i>Maianthemum bifolium</i>	8
<i>Gymnocarpium dryopteris</i>	8
<i>Stellaria longifolia</i>	8
<i>Vaccinium vitis-idaea</i>	8
<i>Rubus saxatilis</i>	8
<i>Lycopodium annotinum</i>	9
<i>Melampyrum sylvaticum</i>	9
<i>Vaccinium myrtillus</i>	9
<i>Deschampsia flexuosa</i>	9
<i>Linnaea borealis</i>	9
<i>Juncus filiformis</i>	10
<i>Calamagrostis arundinacea</i>	10
<i>Solidago virgaurea</i>	10
<i>Melica nutans</i>	10
<i>Epilobium montanum</i>	10
<i>Carex digitata</i>	10
<i>Veronica officinalis</i>	11
<i>Goodyera repens</i>	12
<i>Fragaria vesca</i>	12
<i>Viola riviniana</i>	12
<i>Potentilla erecta</i>	13
<i>Lathyrus vernus</i>	14
<i>Geranium sylvaticum</i>	15

Appendix 4. Optimum distance (meters) of moss species from the stream. Optimum distances are based on weighted averaging. Data is from the unmanaged reference sites.

Moss species	Optimum
<i>Calliergonella cuspidata</i>	1
<i>Campylium stellatum</i>	1
<i>Drepanocladus aduncus</i>	1
<i>Fissidens osmundoides</i>	1
<i>Pogonatum urnigerum</i>	1
<i>Sphagnum papillosum</i>	1
<i>Plagiothecium denticulatum</i>	1
<i>Brachythecium rivulare</i>	2
<i>Plagiothecium succulentum</i>	2
<i>Atrichum undulatum</i>	3
<i>Polytrichastrum formosum</i>	3
<i>Plagiomnium cuspidatum</i>	4
<i>Calliergon cordifolium</i>	4
<i>Ptilium crista-castrensis</i>	4
<i>Tetraphis pellucida</i>	4
<i>Rhizomnium punctatum</i>	5
<i>Plagiomnium ellipticum</i>	5
<i>Sphagnum fallax</i>	5
<i>Sphagnum riparium</i>	5
<i>Straminergon stramineum</i>	6
<i>Pohlia nutans</i>	6
<i>Sanionia uncinata</i>	6
<i>Rhizomnium magnifolium</i>	6
<i>Sphagnum squarrosum</i>	6
<i>Pseudobryum cinclidioides</i>	6
<i>Climacium dendroides</i>	6
<i>Sphagnum girgensohnii</i>	6
<i>Plagiothecium laetum</i>	7
<i>Mnium hornum</i>	7
<i>Rhizomnium pseudopunctatum</i>	7
<i>Rhytidiadelphus triquetrus</i>	7
<i>Dicranum fuscescens</i>	7
<i>Sphagnum angustifolium</i>	8
<i>Rhodobryum roseum</i>	8
<i>Polytrichum juniperinum</i>	8
<i>Polytrichum commune</i>	8
<i>Cirriphyllum piliferum</i>	8
<i>Dicranum scoparium</i>	8
<i>Dicranum polysetum</i>	9
<i>Pleurozium schreberi</i>	9
<i>Hylocomium splendens</i>	9
<i>Dicranum majus</i>	9

<i>Aulacomnium palustre</i>	10
<i>Rhytidiadelphus subpinnatus</i>	10
<i>Plagiomnium medium</i>	11
<i>Sphagnum capillifolium</i>	11

Appendix 5. Optimum buffer width (meters) and time from harvesting (years) for vascular plant species. Optimums are based on weighted averaging. Species are from the FAH.

Plant species	Buffer	Time
<i>Epilobium angustifolium</i>	0	5
<i>Potentilla erecta</i>	1	29
<i>Lysimachia thyrsoiflora</i>	1	5
<i>Stellaria longifolia</i>	3	5
<i>Lychnis flos-cuculi</i>	3	5
<i>Potentilla palustris</i>	4	15
<i>Equisetum arvense</i>	5	16
<i>Rubus arcticus</i>	7	10
<i>Calamagrostis canescens</i>	7	7
<i>Lysimachia vulgaris</i>	7	8
<i>Peucedanum palustre</i>	8	18
<i>Ranunculus repens</i>	8	12
<i>Paris quadrifolia</i>	9	18
<i>Calamagrostis purpurea</i>	9	16
<i>Fragaria vesca</i>	9	18
<i>Melica nutans</i>	9	16
<i>Epilobium palustre</i>	9	5
<i>Equisetum hyemale</i>	9	18
<i>Carex nigra</i>	10	22
<i>Filipendula ulmaria</i>	11	11
<i>Viola palustris</i>	13	14
<i>Rubus chamaemorus</i>	13	14
<i>Geranium sylvaticum</i>	13	1
<i>Galium palustre</i>	14	13
<i>Equisetum pratense</i>	14	8
<i>Deschampsia cespitosa</i>	15	13
<i>Viola riviniana</i>	15	35
<i>Agrostis canina</i>	15	16
<i>Carex globularis</i>	15	19
<i>Pyrola minor</i>	15	1
<i>Gymnocarpium dryopteris</i>	16	16
<i>Deschampsia flexuosa</i>	16	17
<i>Solidago virgaurea</i>	16	23
<i>Carex digitata</i>	16	26
<i>Lycopodium annotinum</i>	16	12
<i>Caltha palustris</i>	16	11
<i>Dryopteris carthusiana</i>	17	16
<i>Scutellaria galericulata</i>	17	9
<i>Linnaea borealis</i>	17	18
<i>Rubus idaeus</i>	17	17

<i>Angelica sylvestris</i>	18	19
<i>Trientalis europaea</i>	18	13
<i>Phegopteris connectilis</i>	18	14
<i>Carex canescens</i>	18	15
<i>Vaccinium vitis-idaea</i>	18	16
<i>Melampyrum sylvaticum</i>	19	15
<i>Maianthemum bifolium</i>	20	16
<i>Athyrium filix-femina</i>	20	12
<i>Matteuccia struthiopteris</i>	21	30
<i>Equisetum sylvaticum</i>	21	14
<i>Oxalis acetosella</i>	21	15
<i>Geum rivale</i>	21	22
<i>Calamagrostis arundinacea</i>	22	27
<i>Carex disperma</i>	22	5
<i>Rubus saxatilis</i>	23	17
<i>Vaccinium myrtillus</i>	23	16
<i>Luzula pilosa</i>	26	17
<i>Carex loliacea</i>	29	24
<i>Orthilia secunda</i>	29	9
<i>Moneses uniflora</i>	34	1
<i>Juncus effusus</i>	36	28
<i>Convallaria majalis</i>	45	20

Appendix 6. Optimum buffer width (meters) and time from harvesting (years) for moss species. Optimums are based on weighted averaging. Species are from the FAH.

Moss species	Buffer	Time
<i>Ceratodon purpureus</i>	9	18
<i>Plagiothecium curvifolium</i>	10	28
<i>Plagiothecium cavifolium</i>	12	9
<i>Brachythecium rivulare</i>	12	10
<i>Warnstorfia exannulata</i>	14	8
<i>Rhytidiadelphus subpinnatus</i>	14	8
<i>Paraleucobryum longifolium</i>	14	9
<i>Sphagnum capillifolium</i>	14	9
<i>Climacium dendroides</i>	14	9
<i>Pohlia nutans</i>	14	12
<i>Calliergon cordifolium</i>	14	12
<i>Aulacomnium palustre</i>	15	12
<i>Polytrichastrum formosum</i>	15	15
<i>Sphagnum fallax</i>	15	16
<i>Polytrichum commune</i>	15	19
<i>Polytrichastrum longisetum</i>	15	25
<i>Pseudobryum cinclidioides</i>	16	15
<i>Sphagnum girgensohnii</i>	16	17
<i>Rhizomnium pseudopunctatum</i>	17	12
<i>Plagiomnium medium</i>	17	16
<i>Sanionia uncinata</i>	18	9
<i>Dicranum fuscescens</i>	18	12
<i>Straminergon stramineum</i>	18	21
<i>Dicranum scoparium</i>	19	10
<i>Plagiothecium denticulatum</i>	19	16
<i>Rhizomnium punctatum</i>	19	16
<i>Sphagnum squarrosum</i>	20	13
<i>Brachythecium sp.</i>	20	15
<i>Polytrichum juniperinum</i>	20	15
<i>Plagiothecium laetum</i>	20	16
<i>Sphagnum angustifolium</i>	20	18
<i>Atrichum undulatum</i>	20	22
<i>Plagiomnium cuspidatum</i>	21	11
<i>Dicranum polysetum</i>	21	12
<i>Hylocomium splendens</i>	21	14
<i>Dicranum majus</i>	21	16
<i>Pleurozium schreberi</i>	21	16
<i>Rhodobryum roseum</i>	22	23
<i>Rhytidiadelphus triquetrus</i>	23	13
<i>Sphagnum papillosum</i>	23	18

<i>Plagiomnium ellipticum</i>	30	11
<i>Campylium stellatum</i>	30	13
<i>Rhizomnium magnifolium</i>	32	13
<i>Ptilium crista-castrensis</i>	34	1
<i>Sphagnum riparium</i>	34	1
<i>Tetraphis pellucida</i>	34	1
