

TABLE S2.1 | Physical habitat index (PHI): habitat parameters, condition categories and scores of stream stretches (adapted from Barbour *et al.*, 1999).

Habitat parameter	Condition category																												
	Optimal					Suboptimal					Marginal					Poor													
Sediment deposition	Little or no enlargement of islands or point bars and < 5% of the bottom affected by sediment deposition.					Some new increase in bar formation, mostly from gravel, sand, or fine sediment; 5-30% of the bottom affected; slight deposition in pools.					Moderate deposition of new gravel, sand, or fine sediment on old and new bars; 30-50% of the bottom affected; sediment deposits at obstructions, constrictions and bends; moderate deposition of pools prevalent.					Heavy deposits of fine material, increased bar development; > 50% of the bottom changing frequently; pools almost absent due to substantial sediment deposition.													
Score	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0								
Channel flow status	Water reaches base of both lower banks, and minimal amount of channel substratum is exposed.					Water fills >75% of the available channel; or <25% of channel substratum is exposed.					Water fills 25-75% of the available channel, and/or riffle substrata are mostly exposed.					Very little water in channel and mostly present as standing pools.													
Score	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0								
Vegetative protection (score each bank)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs or non-woody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.					70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.					50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.					Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 cm or less in average stubble height.													
Score	Left bank		10			9			8		7			6		5		4			3		2		1			0	
	Right bank		10			9			8		7			6		5		4			3		2		1			0	
Riparian vegetative zone width (score each bank riparian zone)	Width of riparian zone >18 m; human activities (<i>i.e.</i> , parking lots, roadbeds, clear-cuts, lawns, or crops) have not impacted zone.					Width of riparian zone 12-18 m; human activities have impacted zone only minimally.					Width of riparian zone 6-12 m; human activities have impacted zone a great deal.					Width of riparian zone <6 m; little or no riparian vegetation due to human activities.													
Score	Left bank		10			9			8		7			6		5		4			3		2		1			0	
	Right bank		10			9			8		7			6		5		4			3		2		1			0	

TABLE S2.2 | Habitat parameters statistics, PHI, and area type.

Area	Statistic	Sediment deposition	Channel flow status	Vegetative protection	Riparian vegetative zone width	PHI
FP	Total	193	188	182	183	746
	mean	19.3	18.8	18.2	18.3	75
	sd	0.9	2.2	3.5	3.2	8.6
Out	Total	204	214	207	180	805
	mean	17	17.8	17.3	15	67
	sd	2.4	2.2	2.8	2.3	7.0
SU	Total	245	247	216	205	913
	mean	17.5	17.6	15.4	14.6	65.2
	sd	2.3	2.2	3.1	3.2	9.3



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