Annotated Bibliography of Wetland Mitigation Options in Far Northern Ontario: Instructions on Using the Bibliography

The annotated bibliography is constructed with free Zotero® bibliographic software. The bibliography is public. Our goal is to curate it and keep it up to date.

The library is available at:

https://www.zotero.org/groups/5814951/wetland_mitigation_options_bibliography/library

This brings up the bibliography in Zotero® online. It is functional, but some features of the bibliography may not be optimal in the online version. For best performance use the Zotero® desktop app:

1. Sign up for a Zotero account here.
2. Sign in to Zotero. Select 'Groups' on the top menu, then select 'Search for Groups'. Enter 'Wetland Mitigation' to find this group and select 'Join'.
3. Download the Zotero 7 desktop app and install it.
4. Open the Zotero Desktop app. Go to 'Edit' > 'Preferences' > 'Sync'. Under 'Data Syncing', enter your Zotero login information. This Group on 'Wetland Mitigation Options Bibliography' will appear in the Zotero desktop app.

For each document, web links are included, abstracts are given when available, and a short annotation of the document is given under the 'Notes' field. We also created subject categories for the annotated bibliography, which we include in the 'Tags' field. Each general subject category has hierarchical levels of subcategories (Table 1).

The tags of subject categories are listed in the lower left of the Zotero® screen. Documents can be searched by selecting one or several tags. Selecting multiple tags allows for intersecting searches. For instance, selecting 'peatland' *and* 'drawdown' *and* 'on-site restoration' will list the documents pertaining to the restoration of peatlands that have suffered a water table drawdown. Consulting the subject categories and subcategories will help suggest suitable searches.

The search window in the upper right corner of the screen can also be used to search by author, title, tag, or any word. The advanced search option allows for affirmative or negative searches (i.e. title "contains" versus "does not contain" a word).

Table 1. Subject categories listed as Zotero® tags.

HEADING	2º FILTER	3º FILTER	4º FILTER
Geographic Region	Canada	Ontario	
		Hudson Bay Lowland	
		Boreal Shield	
Ecosystem Type	peatland	bog	
		fen	
		string fen	
		swamp	
	other wetland	marsh	
		saltmarsh	
		pools/ponds	
	coastal ecosystem		
	upland		
	ecotone		
	watercourse		
	water body		
Abiotic/Biotic Component	ecoregions		
	physiography	landform	
		microtopography	
	climate	precipitation	
		microclimate	
		soil temperature	
		cold climate	
		energy balance	
	hydrology	evapotranspiration	
		soil moisture	
		groundwater	
		spring thaw	
		snowpack	
		surface water/runoff	
		water table	
	substrate	peat	
		sediment	
		permafrost	
	biogeochemistry	nutrients	
		water quality	
		pH	
		electrical conductivity	
		salinity	
		sulphur compounds	
	carbon cycle	biochar	
		carbon sequestration	
		carbon storage	
		greenhouse gases	
		decomposition	
		dissolved organic carbon	
		primary productivity	
	food chain		
	microbial activity		
	vegetation	functional group	
		vascular plants	woody plants
			graminoids
			black ash
		bryophytes	sphagnum
	lichens		

Table 1. continued

HEADING	2º FILTER	3º FILTER	4º FILTER
Abiotic/Biotic Component (continued)	fauna	arthropods	gypsy cuckoo bumble bee
			yellow-banded bumble bee
			Suckley's cuckoo bumble bee
		fish	lake sturgeon
		amphibians	
		reptiles	
		birds	migratory birds
			shorebird
			snow geese
			Hudsonian godwit
			lesser yellowlegs
			red knot
			red-necked phalarope
			short-eared owl
			common nighthawk
			olive-sided flycatcher
			bank swallow
			barn swallow
			Canada warbler
			evening grosbeak
			rusty blackbird
		mammals	bats
			beaver
			moose
			coyote
			timber wolf
			eastern red bat
			hoary bat
			silver-haired bat
			little brown myotis
			northern myotis
			tri-colored bat
			caribou
			caribou boreal population
			caribou, eastern migratory population
			wolverine
			polar bear
	human society	social license	
		indigenous perspective	traditional use
			wild foods

Table 1. continued

HEADING	2º FILTER	3º FILTER	4º FILTER
Origin of Impacts	climate change		
	aggregate extraction		
	agriculture		
	cities/towns/villages		
	cumulative effects		
	peat/moss extraction		
	ditching		
	fire		
	forest harvest		
	industrial equipment		
	infrastructure		
	linear disturbance	roads	
		winter roads	
		seismic lines	
		pipelines	
		transmission lines	
	mineral exploration		
	mining	mine footprint	
		aggregate pads	
		drill pads	
		tailings	
		mine wastes	
	mineral processing		
	motor vehicles		
	pollution	air pollution	
		acid rock drainage	
		explosives	
		landfill	
		spills	
		wastewater	
		water pollution	
	power generation		

Table 1. continued

HEADING	2º FILTER	3º FILTER	4º FILTER
Stressor	hydrologic alteration	drawdown	
		drought	
		flooding	
	landscape conversion and fragmentation	ecosystem conversion	
		linear feature	
	fertility change / contamination	fugitive dust	
		herbicide	
		hydrocarbons	
		metal/metalloid	antimony
			arsenic
			chromium
			cobalt
			copper
			lead
			mercury
			nickel
			selenium
			thalium
			zinc
		nutrient enrichment	
		suspended solids	
	substrate disturbance	subsidence	
		compaction	
		geotechnical properties	
		soil warming	
		permafrost thaw	
		smouldering	
		erosion	water erosion
			wind erosion
	vegetation disturbance		
	herbivory		
	predation		
	invasive species		
	other stressor	noise	
		wildlife collisions	
Policy/Statute	federal policy/statute	migratory birds policy	
		species-at-risk	status report
			recovery strategy
			management plan
			conservation agreement
		wetland policy	
	provincial policy/statute	migratory bird policy	
		species-at-risk	status report
			recovery strategy
			conservation agreement
		wetland policy	
		mapping	
	policy discussion paper		
Mitigation Hierarchy	impact avoidance		
	impact minimization		
	on-site restoration		
	offsetting		
	compensaion		

Table 1. continued

HEADING	2º FILTER	3º FILTER	4º FILTER
Mitigation Detail	mine planning	tailings management sedimentation pond mine reclamation	
	remediation	bio/phytoremediation nutrient removal treatment wetland	
	hydrologic management	peat dams rewetting culverts	
	substrate rehabilitation		
	revegetation	passive restoration active restoration donor site aggregate burial	
	best management practice		
Monitoring	remote sensing	unmanned aerial vehicle LiDAR satellite imagery camera traps autonomic acoustical survey	
	peat/sediment cores		
	vegetation sampling		
	reference conditions		
	biomonitoring		
	dendrochronology		