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**Table S1.** Data inputs and methods of analyses used in VOSviewer and Cortex.

Software	Parameter	Inputs/Method of analysis
VOSviewer (Network map)	Bibliographic database file	WoS plaintext file
	Type of analysis	Co-occurrence
	Unit of analysis	Author keywords
	Counting method	Full counting (terms have the same weight)
Cortex (Contingency matrix)	Minimum number of co-occurrence	5
	Bibliographic database file	WOS plaintext file
	Field values	Author keywords – Country
	Contingency analysis measure	Author keywords – Year of publication
	Number of nodes	Chi <sup>2</sup>
		10 (Default software value)

**Table S2.** Major subject areas relevant to constructed wetlands and stormwater management research

Subject area	Number of Documents	% of Total
Environmental Sciences Ecology	334	80.87%
Engineering	204	49.40%
Water Resources	146	35.35%
Geology	19	4.60%
Marine Freshwater Biology	19	4.60%
Science Technology Other Topics	16	3.87%
Meteorology Atmospheric Sciences	11	2.66%
Others*	68	16.46%

\*Subject areas with less than 10 documents

**Table S3.** List of most productive journals in terms of the number of publication

Journal	Impact factor (as of 2020)	Number of Documents	% of Total
Ecological Engineering	4.035	83	20.10%
Science of the Total Environment	7.963	26	6.30%
Water	3.103	22	5.33%
Water Science and Technology	1.915	21	5.08%
Desalination and Water Treatment	1.254	17	4.12%
Water Research	11.24	14	3.39%
Journal of Environmental Engineering	1.746	11	2.66%
Others*	-	219	53.03%

\*Journals with less than 10 publications

**Table S4.** List of highly-cited publications

Title	Author/s	Journal (Year)	Total number of citations
Improving Urban Stormwater Runoff Quality by Nutrient Removal through Floating Treatment Wetlands and Vegetation Harvest	Bing, X., Xue W., Liu J., Jiaqiang, W., Zhao, Y., & Cao, W.	Scientific Reports (2017)	101
Evaluation of floating treatment wetlands as retrofits to existing stormwater retention ponds	Winston, R. J., Hunt, W. F., Kennedy, S. G., Merriman, L. S., Chandler, J., & Brown, D.	Ecological Engineering (2013)	97
Floating treatment wetland aided remediation of nitrogen and phosphorus from simulated stormwater runoff	White, S. A., & Cousins, M. M.	Ecological Engineering (2013)	80
Floating treatment wetland retrofit to improve stormwater pond performance for suspended solids, copper and zinc	Borne, K. E., Fassman, E. A., & Tanner, C. C.	Ecological Engineering (2013)	77
Temporary Storage or Permanent Removal? The Division of Nitrogen between Biotic Assimilation and Denitrification in Stormwater Biofiltration Systems	Payne, G., Fletcher, T., Russel, D., Grace, M., Cavagnaro, T., Evrard, V., Deletic, A., Hatt, B., & Cook, P.	PloS one (2014)	67

**Table S5.** Drainage areas (in ha.) of dominant land use types in reviewed scientific publications

Land use type	Agricultural	Highway	Mixed	Parking lot	Residential	Urban	Others*
Frequency, n	41	10	25	7	12	54	5
Minimum	0.81	0.13	3.60	2.31	2.00	0.04	0.09
Maximum	86000.00	13.07	3139.00	2.37	572.00	2060.00	2.30
Median	42.70	1.70	320.00	2.37	5.40	95.00	0.45
Average	7876.51	3.01	781.30	2.35	76.51	271.86	0.82
Standard Deviation	24704.92	4.14	1059.91	0.03	176.99	465.53	0.90

\*Land use types with a frequency of less than 5 (i.e. suburban, grassland, municipal, etc.)

**Table S1.** List of plants used in stormwater treatment wetlands.

Species	Genus	Species	Genus
<i>Acorus calamus</i>	<i>Acorus</i>	<i>Carex vulpinoidea</i>	<i>Carex</i>
<i>Acorus gramineus</i>	<i>Acorus</i>	<i>Carex flacca</i>	<i>Carex</i>
<i>Aeschynomene indica L.</i>	<i>Aeschynomene</i>	<i>Carex lacustris</i>	<i>Carex</i>
<i>Agrostis alba</i>	<i>Agrostis</i>	<i>Carex lupulina Muhl. ex Willd</i>	<i>Carex</i>
<i>Agrostis hyemalis</i>	<i>Agrostis</i>	<i>Ceratophyllum demersum</i>	<i>Ceratophyllum</i>
<i>Alisma plantago-aquatica</i>	<i>Alisma</i>	<i>Cladium jamaicense Crantz</i>	<i>Cladium</i>
<i>Alisma subcordatum</i>	<i>Alisma</i>	<i>Cyperus difformis L.</i>	<i>Cyperus</i>
<i>Alisma triviale</i>	<i>Alisma</i>	<i>Cyperus eragrostis</i>	<i>Cyperus</i>
<i>Alternanthera philoxeroides</i>	<i>Alternanthera</i>	<i>Cyperus papyrus</i>	<i>Cyperus</i>
<i>Andropogon gerardii</i>	<i>Andropogon</i>	<i>Cyperus rotundus</i>	<i>Cyperus</i>
<i>Asclepias incarnata</i>	<i>Asclepias</i>	<i>Daucus carota</i>	<i>Daucus</i>
<i>Aster puniceous</i>	<i>Aster</i>	<i>Echinochloa crus-galli (L.) P.Beauv.</i>	<i>Echinochloa</i>
<i>Aster simplex</i>	<i>Aster</i>	<i>Eclipta prostrata (L.) L.</i>	<i>Eclipta</i>
<i>Atriplex patula</i>	<i>Atriplex</i>	<i>Eichhornia crassipes</i>	<i>Eichhornia</i>
<i>Baumea juncea</i>	<i>Baumea</i>	<i>Eleocharis acicularis</i>	<i>Eleocharis</i>
<i>Baumea articulata</i>	<i>Baumea</i>	<i>Eleocharis interstincta</i>	<i>Eleocharis</i>
<i>Baumea preissii</i>	<i>Baumea</i>	<i>Eleocharis palustris</i>	<i>Eleocharis</i>
<i>Baumea rubiginosa</i>	<i>Baumea</i>	<i>Eleocharis pseudoalbibracteata S.González &amp; Guagl.</i>	<i>Eleocharis</i>
<i>Bidens cernua</i>	<i>Bidens</i>	<i>Eleocharis sphacelata</i>	<i>Eleocharis</i>
<i>Bidens frondosa L.</i>	<i>Bidens</i>	<i>Eleocharis acuta</i>	<i>Eleocharis</i>
<i>Bidens laevis</i>	<i>Bidens</i>	<i>Elymus canadensis</i>	<i>Elymus</i>
<i>Bidens vulgaris</i>	<i>Bidens</i>	<i>Epilobium coloratum</i>	<i>Epilobium</i>
<i>Bolboschoenus caldwellii</i>	<i>Bolboschoenus</i>	<i>Eriocaulon miquelianum Körn.</i>	<i>Eriocaulon</i>
<i>Bolboschoenus medianus</i>	<i>Bolboschoenus</i>	<i>Filipendula ulmaria L. (Maxim.)</i>	<i>Filipendula</i>
<i>Brachiaria mutica</i>	<i>Brachiaria</i>	<i>Fraxinus pennsylvanica</i>	<i>Fraxinus</i>
<i>Butomus umbellatus</i>	<i>Butomus</i>	<i>Glyceria fluitans</i>	<i>Glyceria</i>
<i>Calamagrostis canadensis</i>	<i>Calamagrostis</i>	<i>Glyceria striata</i>	<i>Glyceria</i>
<i>Calix Cinereal</i>	<i>Calix</i>	<i>Helenium autumnale</i>	<i>Helenium</i>
<i>Canna flaccida</i>	<i>Canna</i>	<i>Hibiscus moscheutos</i>	<i>Hibiscus</i>
<i>Canna indica</i>	<i>Canna</i>	<i>Hydrilla verticillata</i>	<i>Hydrilla</i>
<i>Cardamine lyrata Bunge</i>	<i>Cardamine</i>	<i>Hydrocotyle umbellata</i>	<i>Hydrocotyle</i>

Species	Genus	Species	Genus
<i>Carex appressa</i>	<i>Carex</i>	<i>Impatiens textori</i> Miq.	<i>Impatiens</i>
<i>Carex bebbii</i>	<i>Carex</i>	<i>Iris ensata</i> var. <i>spontanea</i>	<i>Iris</i>
<i>Carex comosa</i>	<i>Carex</i>	<i>Iris pseudacorus</i> L.	<i>Iris</i>
<i>Carex hystericina</i>	<i>Carex</i>	<i>Iris versicolor</i> L.	<i>Iris</i>
<i>Carex riparia</i>	<i>Carex</i>	<i>Juncus cyperoides</i> Laharpe.	<i>Juncus</i>
<i>Carex scoparia</i>	<i>Carex</i>	<i>Juncus effusus</i> L.	<i>Juncus</i>
<i>Carex stricta</i>	<i>Carex</i>	<i>Juncus kraussi</i>	<i>Juncus</i>
<i>Carex virgata</i>	<i>Carex</i>	<i>Juncus pallescens</i> Lam. var. <i>Pallescens</i>	<i>Juncus</i>
<i>Juncus pallidus</i>	<i>Juncus</i>	<i>Pontederia cordata</i>	<i>Pontederia</i>
<i>Juncus tenuis</i>	<i>Juncus</i>	<i>Pontederia sagittata</i>	<i>Pontederia</i>
<i>Juncus torreyi</i>	<i>Juncus</i>	<i>Potamogeton distinctus</i> A.Benn.	<i>Potamogeton</i>
<i>Leersia oryzoides</i>	<i>Leersia</i>	<i>Potamogeton natans</i>	<i>Potamogeton</i>
<i>Lemna minor</i>	<i>Lemna</i>	<i>Potamogeton pectinatus</i>	<i>Potamogeton</i>
<i>Ludwigia leptocarpa</i>	<i>Ludwigia</i>	<i>Potamogeton illinoensis</i>	<i>Potamogeton</i>
<i>Ludwigia peruviana</i>	<i>Ludwigia</i>	<i>Ranunculus sceleratus</i> L.	<i>Ranunculus</i>
<i>Lycopus americana</i>	<i>Lycopus</i>	<i>Rudbeckia hirta</i>	<i>Rudbeckia</i>
<i>Lysimachia christinae</i>	<i>Lysimachia</i>	<i>Rumex crispus</i>	<i>Rumex</i>
<i>Lysimachia vulgaris</i> L.	<i>Lysimachia</i>	<i>Sagittaria lancifolia</i>	<i>Sagittaria</i>
<i>Lysimachia ciliata</i>	<i>Lysimachia</i>	<i>Sagittaria latifolia</i>	<i>Sagittaria</i>
<i>Lythrum anceps</i> (Koehne) Makino	<i>Lythrum</i>	<i>Salicornia europaea</i>	<i>Salicornia</i>
<i>Lythrum salicaria</i> L.	<i>Lythrum</i>	<i>Salix caroliniana</i>	<i>Salix</i>
<i>Mikania scandens</i>	<i>Mikania</i>	<i>Salix gracilistyla</i> Miq.	<i>Salix</i>
<i>Miscanthus sacchariflorus</i> (Maxim.) Hack.	<i>Miscanthus</i>	<i>Salix pierotii</i> Miq.	<i>Salix</i>
<i>Monochoria vaginalis</i> (Burm.f.) C.Presl	<i>Monochoria</i>	<i>Saururus cernuus</i>	<i>Saururus</i>
<i>Myriophyllum aquaticum</i>	<i>Myriophyllum</i>	<i>Schoenoplectus americanus</i>	<i>Schoenoplectus</i>
<i>Myriophyllum quitense</i> Kunth.	<i>Myriophyllum</i>	<i>Schoenoplectus californicus</i>	<i>Schoenoplectus</i>
<i>Najas guadalupensis</i> Spreng	<i>Najas</i>	<i>Schoenoplectus tabernaemontani</i>	<i>Schoenoplectus</i>
<i>Najas marina</i>	<i>Najas</i>	<i>Schoenoplectus validus</i>	<i>Schoenoplectus</i>
<i>Nymphaea odorata</i>	<i>Nymphaea</i>	<i>Scirpus atrovirens</i>	<i>Scirpus</i>
<i>Nymphaea tetragona</i> Georgi	<i>Nymphaea</i>	<i>Scirpus cyperinus</i>	<i>Scirpus</i>
<i>Nymphoides peltata</i> (S. G. Gmel.) Kuntze	<i>Nymphoides</i>	<i>Solidago canadensis</i>	<i>Solidago</i>
<i>Oenanthe javanica</i> (Blume) DC.	<i>Oenanthe</i>	<i>Sonchus arvensis</i>	<i>Sonchus</i>

Species	Genus	Species	Genus
<i>Panicum hemitomon</i>	<i>Panicum</i>	<i>Spartina pectinata</i>	<i>Spartina</i>
<i>Panicum virgatum</i>	<i>Panicum</i>	<i>Spergularia canadensis</i>	<i>Spergularia</i>
<i>Peltandra virginica</i>	<i>Peltandra</i>	<i>Spirodela polyrrhiza</i>	<i>Spirodela</i>
<i>Persicaria hydropiper (L.) Delarbre</i>	<i>Persicaria</i>	<i>Themeda australis</i>	<i>Themeda</i>
<i>Persicaria hydropiperoides</i>	<i>Persicaria</i>	<i>Trifolium pratense</i>	<i>Trifolium</i>
<i>Phalaris arundinacea L.</i>	<i>Phalaris</i>	<i>Trifolium repens</i>	<i>Trifolium</i>
<i>Phragmites australis</i>	<i>Phragmites</i>	<i>Triglochin procera</i>	<i>Triglochin</i>
<i>Phragmites japonicus Steud.</i>	<i>Phragmites</i>	<i>Typha angustifolia L.</i>	<i>Typha</i>
<i>Phyla nodiflora</i>	<i>Phyla</i>	<i>Typha domingensis</i>	<i>Typha</i>
<i>Pistia stratiotes</i>	<i>Pistia</i>	<i>Typha latifolia L.</i>	<i>Typha</i>
<i>Pluchea odorata</i>	<i>Pluchea</i>	<i>Typha orientalis</i>	<i>Typha</i>
<i>Poa palustris</i>	<i>Poa</i>	<i>Verbena hastata</i>	<i>Verbena</i>
<i>Poa pratensis</i>	<i>Poa</i>	<i>Verbena urticifolia</i>	<i>Verbena</i>
<i>Polygonum densiflorum</i>	<i>Polygonum</i>	<i>Vernonia fasciculata</i>	<i>Vernonia</i>
<i>Polygonum persicaria</i>	<i>Polygonum</i>	<i>Veronica anagallis-aquatica L.</i>	<i>Veronica</i>
<i>Veronica perigrina</i>	<i>Veronica</i>		
<i>Veronica serpyllifolia L.</i>	<i>Veronica</i>		
<i>Veronica undulata Wall.</i>	<i>Veronica</i>		
<i>Vicia villosa</i>	<i>Vicia</i>		