SUPPLEMENTARY MATERIAL

Ecosystem Functions in Urban Stormwater Management Ponds: A Scoping Review

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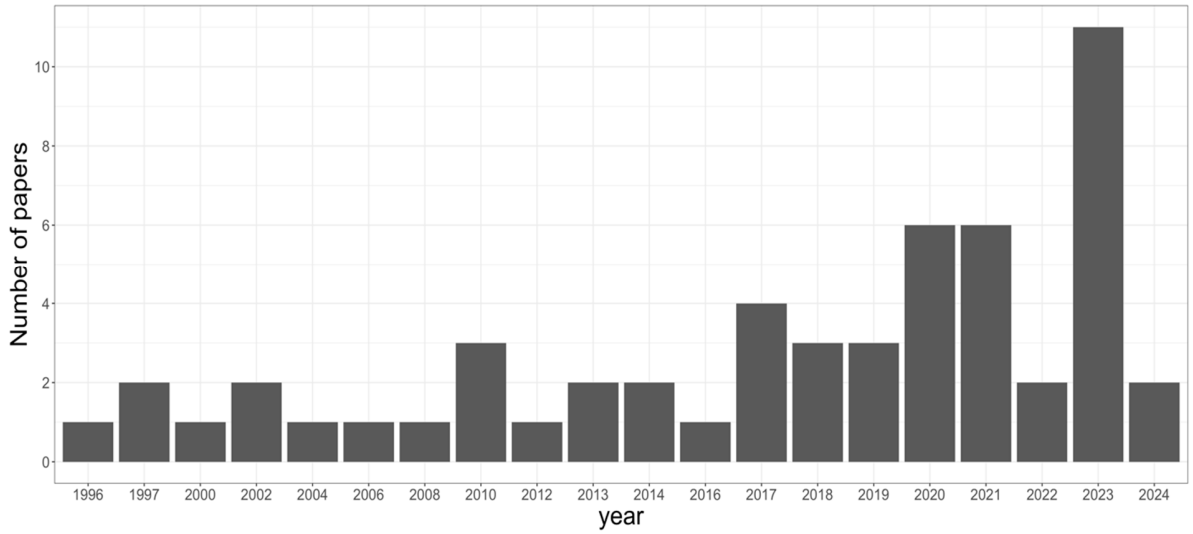

Figure S1. Distribution of papers found per year. We used "stormwater pond", "stormwater management pond" and "wet pond" AND one of the search terms (biodiversity, habitat, contaminant, nutrient, sediment, temperature) in each search. Bars show he total number of papers that met our screening criteria per year.

Table S1. Full list of papers found using the Web of Science database. We used "stormwater pond", "stormwater management pond" and "wet pond" AND one of the search terms (biodiversity, habitat, contaminant, nutrient, sediment, temperature) in each search. Each paper was assessed for suitability and action was taken (removed or kept in the list). Papers retained were grouped into biological, geochemical or physical processes that describe ecosystem function in stormwater management ponds.

Process	Authors	Paper title	Journal	Year	DOI	Action	Search term
Biological	Rybak, J; Pasternak, G	Analysis of Water Quality in the Area of Wroclaw's Aquiferous Layers with Macroinvertebrates as Bioindicators	OCHRONA SRODOWISKA	2010	NA	removed	biodiversity
	Tixier, G; Lafont, M; Grapentine, L; Rochfort, Q; Marsalek, J	Ecological risk assessment of urban stormwater ponds: Literature review and proposal of a new conceptual approach providing ecological quality goals and the associated bioassessment tools	ECOLOGICAL INDICATORS	2011	10.1016/j.ecolind.2011.03.027	removed	biodiversity
	Sinclair, JS; Adams, CR; Reisinger, AJ; Bean, E; Reisinger, LS; Holmes, AL; Iannone, BV	High similarity and management-driven differences in the traits of a diverse pool of invasive stormwater pond plants	LANDSCAPE AND URBAN PLANNING	2020	10.1016/j.landurbplan.2020.103839	kept	biodiversity

Tixier, G; Rochfort, Q; Grapentine, L; Marsalek, J; Lafont, M	In search of effective bioassessment of urban stormwater pond sediments: enhancing the 'sediment quality triad' approach with oligochaete metrics	WATER SCIENCE AND TECHNOLOGY	2011	10.2166/wst.2011.155	removed	biodiversity
Stajkowski, S; Hotson, E; Zorica, M; Farghaly, H; Bonakdari, H; McBean, E; Gharabaghi, B	Modeling stormwater management pond thermal impacts during storm events	JOURNAL OF HYDROLOGY	2023	10.1016/j.jhydrol.2023.129413	removed	biodiversity
Minelgaite, G; Frost, PC; Xenopoulos, MA; Stephansen, DA; Fejerskov, ML; Vollertsen, J	Planktonic algae abundance and diversity are similar in urban stormwater ponds of different geographic locations and natural shallow lakes	URBAN ECOSYSTEMS	2020	10.1007/s11252-020-00967-7	kept	biodiversity
Lenzewski, N; Jensen, K; Ludewig, K	Seed bank has the potential for re-colonising urban stormwater ponds after reconstruction	HYDROBIOLOGIA	2021	10.1007/s10750-020-04365-0	kept	biodiversity
Tixier, G; Rochfort, Q; Grapentine, L; Marsalek, J; Lafont, M	Spatial and seasonal toxicity in a stormwater management facility: Evidence obtained by adapting an integrated sediment quality assessment approach	WATER RESEARCH	2012	10.1016/j.watres.2011.12.031	removed	biodiversity
Mckercher, LJ; Kimball, ME; Scaroni, AE; White, SA; Strosnider, WHJ	Stormwater ponds serve as variable quality habitat for diverse taxa	WETLANDS ECOLOGY AND MANAGEMENT	2024	10.1007/s11273-023-09964-x	kept	biodiversity
Sinclair, JS; Reisinger, AJ; Bean, E; Adams, CR; Reisinger, LS; Iannone, BV	Stormwater ponds: An overlooked but plentiful urban designer ecosystem provides invasive plant habitat in a subtropical region (Florida, USA)	SCIENCE OF THE TOTAL ENVIRONMENT	2020	10.1016/j.scitotenv.2019.135133	kept	biodiversity
Scholz, M	Sustainable operation of a small-scale flood-attenuation wetland and dry pond system	JOURNAL OF THE CHARTERED INSTITUTION OF WATER AND ENVIRONMENTAL MANAGEMENT	2003		removed	biodiversity
Tixier, G; Rochfort, Q; Grapentine, L; Marsalek, J; Lafont, M; Vivien, R	Toxicity of sediments in eight urban stormwater management ponds: bioassessment by an oligochaete community metrics used in the sediment quality triad	WATER SCIENCE AND TECHNOLOGY	2023	10.2166/wst.2023.051	kept	biodiversity

Sinclair, JS; Reisinger, LS; Adams, CR; Bean, E; Reisinger, AJ; Iannone, BV	Vegetation management and benthic macroinvertebrate communities in urban stormwater ponds: implications for regional biodiversity	URBAN ECOSYSTEMS	2021	10.1007/s11252-020-01072-5	kept	biodiversity
Anderson, BC; Bell, T; Hodson, P; Marsalek, J; Watt, WE	Accumulation of trace metals in freshwater invertebrates in stormwater management facilities	WATER QUALITY RESEARCH JOURNAL OF CANADA	2004	10.2166/wqrj.2004.049	removed	habitat
Bartlett, AJ; Rochfort, Q; Brown, LR; Marsalek, J	Causes of toxicity to Hyalella azteca in a stormwater management facility receiving highway runoff and snowmelt. Part II: Salts, nutrients, and water quality	SCIENCE OF THE TOTAL ENVIRONMENT	2012	10.1016/j.scitotenv.2011.11.036	removed	habitat
Johnson, MS; Black, R	Effects of contrasting tidal habitats on growth, survivorship and dispersal in an intertidal snail	JOURNAL OF EXPERIMENTAL MARINE BIOLOGY AND ECOLOGY	2008	10.1016/j.jembe.2008.06.021	removed	habitat
Johnson, MS; Black, R	Effects of habitat on growth and shape of contrasting phenotypes of Bembicium vittatum Philippi in the Houtman Abrolhos Islands, Western Australia	HYDROBIOLOGIA	1998	10.1023/A:1003241722328	removed	habitat
Wang, CY; Sample, DJ; Day, SD; Grizzard, TJ	Floating treatment wetland nutrient removal through vegetation harvest and observations from a field study	ECOLOGICAL ENGINEERING	2015	10.1016/j.ecoleng.2014.05.018	removed	habitat
McManamay, RA; Young, JT; Orth, DJ	Lethal and Sublethal Effects of Embryonic and Larval Exposure of Hyla versicolor to Stormwater Pond Sediments	ARCHIVES OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY	2010	10.1007/s00244-009-9373-0	kept	habitat
Lenzewski, N; Jensen, K; Ludewig, K	Microcosm investigations of stormwater pond sediment toxicity to embryonic and larval amphibians: Variation in sensitivity among species	ENVIRONMENTAL POLLUTION	2008	10.1016/j.envpol.2007.10.003	removed	habitat
Krompart, J; Cockburn, JMH; Villard, PV	Pocket wetlands as additions to stormwater treatment train systems: a case study from a restored stream in Brampton, ON, Canada	CANADIAN WATER RESOURCES JOURNAL	2018	10.1080/07011784.2018.1459863	removed	habitat
Snodgrass, JW; Casey, RE; Joseph, D; Simon, JA	Seed bank has the potential for re-colonising urban stormwater ponds after reconstruction	HYDROBIOLOGIA	2021	10.1007/s10750-020-04365-0	kept	habitat

	Sinclair, JS; Reisinger, AJ; Bean, E; Adams, CR; Reisinger, LS; Iannone, BV	Spawning of White Sucker (Catostomus commersoni) in a Stormwater Pond Inlet	AMERICAN MIDLAND NATURALIST	2012		removed	habitat
	Brand, AB; Snodgrass, JW; Gallagher, MT; Casey, RE; Van Meter, R	Stormwater ponds serve as variable quality habitat for diverse taxa	WETLANDS ECOLOGY AND MANAGEMENT	2023	10.1007/s11273-023-09964-x	kept	habitat
	Mckercher, LJ; Kimball, ME; Scaroni, AE; White, SA; Strosnider, WHJ	Stormwater ponds: An overlooked but plentiful urban designer ecosystem provides invasive plant habitat in a subtropical region (Florida, USA)	SCIENCE OF THE TOTAL ENVIRONMENT	2020	10.1016/j.scitotenv.2019.135133	kept	habitat
Geochemical							
	DeLorenzo, ME; Thompson, B; Cooper, E; Moore, J; Fulton, MH	A long-term monitoring study of chlorophyll, microbial contaminants, and pesticides in a coastal residential stormwater pond and its adjacent tidal creek	ENVIRONMENTAL MONITORING AND ASSESSMENT	2012	10.1007/s10661-011-1972-3	kept	contaminant
	Allafchi, F; Valeo, C; He, JN; Neumann, N	A mechanistic model for estimating bacteria levels in stormwater ponds	JOURNAL OF HYDRO-ENVIRONMENT RESEARCH	2021	10.1016/j.jher.2021.06.002	removed	contaminant
	Anderson, BC; Bell, T; Hodson, P; Marsalek, J; Watt, WE	Accumulation of trace metals in freshwater invertebrates in stormwater management facilities	WATER QUALITY RESEARCH JOURNAL OF CANADA	2004	10.2166/wqrj.2004.049	kept	contaminant
	Phelps, HL	Active biomonitoring with Corbicula for USEPA priority pollutant and metal sources in the Anacostia River (DC, Maryland, USA)	INTEGRATED ENVIRONMENTAL ASSESSMENT AND MANAGEMENT	2016	10.1002/ieam.1701	removed	contaminant
	Allafchi, F; Valeo, C; He, JX; Neumann, NF	An Integrated Hydrological-CFD Model for Estimating Bacterial Levels in Stormwater Ponds	WATER	2019	10.3390/w11051016	kept	contaminant
	Azah, E; Kim, H; Townsend, T	Assessment of direct exposure and leaching risk from PAHs in roadway and stormwater system residuals	SCIENCE OF THE TOTAL ENVIRONMENT	2017	10.1016/j.scitotenv.2017.07.136	removed	contaminant
	Ivanovsky, A; Belles, A; Criquet, J; Dumoulin, D; Noble, P; Alary, C; Billon, G	Assessment of the treatment efficiency of an urban stormwater pond and its impact on the natural downstream watercourse	JOURNAL OF ENVIRONMENTAL MANAGEMENT	2018	10.1016/j.jenvman.2018.08.015	kept	contaminant

Bartlett, AJ; Rochfort, Q; Brown, LR; Marsalek, J	Causes of toxicity to Hyalella azteca in a stormwater management facility receiving highway runoff and snowmelt. Part II: Salts, nutrients, and water quality	SCIENCE OF THE TOTAL ENVIRONMENT	2012	10.1016/j.scitotenv.2011.11.036	removed	contaminant
Jang, YC; Jain, P; Tolaymat, T; Dubey, B; Singh, S; Townsend, T	Characterization of roadway stormwater system residuals for reuse and disposal options	SCIENCE OF THE TOTAL ENVIRONMENT	2010	10.1016/j.scitotenv.2010.01.036	kept	contaminant
Camponelli, KM; Lev, SM; Snodgrass, JW; Landa, ER; Casey, RE	Chemical fractionation of Cu and Zn in stormwater, roadway dust and stormwater pond sediments	ENVIRONMENTAL POLLUTION	2010	10.1016/j.envpol.2010.02.024	removed	contaminant
Bishop, CA; Struger, J; Shirose, LJ; Dunn, L; Campbell, GD	Contamination and wildlife communities in stormwater detention ponds in Guelph and the Greater Toronto Area, Ontario, 1997 and 1998. Part II - Contamination and biological effects of contamination	WATER QUALITY RESEARCH JOURNAL OF CANADA	2000	10.2166/wqrj.2000.027	kept	contaminant
Flanagan, K; Blecken, GT; Österlund, H; Nordqvist, K; Viklander, M	Contamination of Urban Stormwater Pond Sediments: A Study of 259 Legacy and Contemporary Organic Substances	ENVIRONMENTAL SCIENCE & TECHNOLOGY	2021	10.1021/acs.est.0c07782	kept	contaminant
Gavric, S; Flanagan, K; Österlund, H; Blecken, GT; Viklander, M	Facilitating maintenance of stormwater ponds: comparison of analytical methods for determination of metal pollution	ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH	2022	10.1007/s11356-022-20694-0	kept	contaminant
Philippe, M; Le Pape, P; Resongles, E; Landrot, G; Freydier, R; Bordier, L; Baptiste, B; Delbes, L; Baya, C; Casiot, C; Ayrault, S	Fate of antimony contamination generated by road traffic - A focus on Sb geochemistry and speciation in stormwater ponds	CHEMOSPHERE	2023	10.1016/j.chemosphere.2022.137368	kept	contaminant
Tixier, G; Rochfort, Q; Grapentine, L; Marsalek, J; Lafont, M	In search of effective bioassessment of urban stormwater pond sediments: enhancing the 'sediment quality triad' approach with oligochaete metrics	WATER SCIENCE AND TECHNOLOGY	2011	10.2166/wst.2011.155	removed	contaminant

Shahirnia, M; Vidrio-Sahagún, CT; He, JX; Valeo, C; van Duin, B; Beaudry, M; Neumann, NF	Land use and rainfall influences on bacterial levels and sources in stormwater ponds	ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH	2023	10.1007/s11356-023-30264-7	kept	contaminant
Pettersson, TJR; Åström, J	Microbial Contaminants Removal in a Stormwater Pond	HIGHWAY AND URBAN ENVIRONMENT	2010	10.1007/978-90-481-3043-6_20	kept	contaminant
Minelgaite, G; Stephansen, DA; Simon, M; Fejerskov, ML; Vollertsen, J	No Clear Response in the Stormwater Phytoplankton Community to Biocide Contamination	WATER	2020	10.3390/w12113120	removed	contaminant
Alrabie, NA; Mohamat-Yusuff, F; Rohasliney, H; Zulkeflee, Z; Amal, MNA; Arshad, A; Zulkifli, SZ; Wijaya, AR; Masood, N; Sani, MSA	Preliminary Evaluation of Heavy Metal Contamination and Source Identification in Kuala Lumpur SMART Stormwater Pond Sediments Using Pb Isotopic Signature	SUSTAINABILITY	2021	10.3390/su13169020	kept	contaminant
Lembcke, D; Thompson, B; Read, K; Betts, A; Singaraja, D	Reducing road salt application by considering winter maintenance needs in parking lot design	JOURNAL OF GREEN BUILDING	2017	10.3992/1943-4618.12.2.1	removed	contaminant
Van Meter, RJ; Swan, CM	Road Salts as Environmental Constraints in Urban Pond Food Webs	PLOS ONE	2014	10.1371/journal.pone.0090168	removed	contaminant
Crane, JL	Source Apportionment and Distribution of Polycyclic Aromatic Hydrocarbons, Risk Considerations, and Management Implications for Urban Stormwater Pond Sediments in Minnesota, USA	ARCHIVES OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY	2014	10.1007/s00244-013-9963-8	kept	contaminant
Brown, AS; Yun, XY; McKenzie, ER; Heron, CG; Field, JA; Salice, CJ	Spatial and temporal variability of per- and polyfluoroalkyl substances (PFAS) in environmental media of a small pond: Toward an improved understanding of PFAS bioaccumulation in fish	SCIENCE OF THE TOTAL ENVIRONMENT	2023	10.1016/j.scitotenv.2023.163149	kept	contaminant
da Silva, EP; Antoniosi, NR; Pereira, J; Formiga, KTM	Temporal variation and risk assessment of heavy metals and nutrients from water and sediment in a stormwater pond, Brazil	WATER SUPPLY	2023	10.2166/ws.2022.441	kept	contaminant

Tixier, G; Rochfort, Q; Grapentine, L; Marsalek, J; Lafont, M; Vivien, R	Toxicity of sediments in eight urban stormwater management ponds: bioassessment by an oligochaete community metrics used in the sediment quality triad	WATER SCIENCE AND TECHNOLOGY	2023	10.2166/wst.2023.051	removed	contaminant
Olmsted, JL; Ahmadireskety, A; Da Silva, BF; Robey, N; Aristizabal-Henao, JJ; Bonzongo, JCJ; Bowden, JA	Using Regulatory Classifications to Assess the Impact of Different Land Use Types on Per- and Polyfluoroalkyl Substance Concentrations in Stormwater Pond Sediments	JOURNAL OF ENVIRONMENTAL ENGINEERING	2021	10.1061/(ASCE)EE.1943-7870.0001906	kept	contaminant
Serrano, L; DeLorenzo, ME	Water quality and restoration in a coastal subdivision stormwater pond	JOURNAL OF ENVIRONMENTAL MANAGEMENT	2008	10.1016/j.jenvman.2007.01.025	kept	contaminant
DeLorenzo, ME; Thompson, B; Cooper, E; Moore, J; Fulton, MH	A long-term monitoring study of chlorophyll, microbial contaminants, and pesticides in a coastal residential stormwater pond and its adjacent tidal creek	ENVIRONMENTAL MONITORING AND ASSESSMENT	2012	10.1007/s10661-011-1972-3	removed	nutrient
Williams, CJ; Frost, PC; Ginn, BK; Marsalek, J; Xenopoulos, MA	Add a dash of salt? Effects of road de-icing salt (NaCl) on benthic respiration and nutrient fluxes in freshwater sediments	LIMNETICA	2023	10.23818/limn.42.17	removed	nutrient
Olding, DD	Algal communities as a biological indicator of stormwater management pond performance and function	WATER QUALITY RESEARCH JOURNAL OF CANADA	2000	10.2166/wqrj.2000.029	removed	nutrient
Sharma, R; Vymazal, J; Malaviya, P	Application of floating treatment wetlands for stormwater runoff: A critical review of the recent developments with emphasis on heavy metals and nutrient removal	SCIENCE OF THE TOTAL ENVIRONMENT	2021	10.1016/j.scitotenv.2021.146044	removed	nutrient
Merriman, LS; Wilson, CE; Winston, RJ; Hunt, WF	Assessing the Importance of Temporary Storage Volume Occupied by Emergent Vegetation in Constructed Storm Water Wetlands	JOURNAL OF HYDROLOGIC ENGINEERING	2013	10.1061/(ASCE)HE.1943-5584.0000713	removed	nutrient

Ivanovsky, A; Belles, A; Criquet, J; Dumoulin, D; Noble, P; Alary, C; Billon, G	Assessment of the treatment efficiency of an urban stormwater pond and its impact on the natural downstream watercourse	JOURNAL OF ENVIRONMENTAL MANAGEMENT	2018	10.1016/j.jenvman.2018.08.015	removed	nutrient
Monaghan, P; Hu, SC; Hansen, G; Ott, E; Nealis, C; Morera, M	Balancing the Ecological Function of Residential Stormwater Ponds with Homeowner Landscaping Practices	ENVIRONMENTAL MANAGEMENT	2016	10.1007/s00267-016-0752-9	removed	nutrient
Williams, CJ; Frost, PC; Xenopoulos, MA	Beyond best management practices: pelagic biogeochemical dynamics in urban stormwater ponds	ECOLOGICAL APPLICATIONS	2013	10.1890/12-0825.1	read	nutrient
Droppo, IG	Biofilm structure and bed stability of five contrasting freshwater sediments	MARINE AND FRESHWATER RESEARCH	2009	10.1071/MF08019	removed	nutrient
Bartlett, AJ; Rochfort, Q; Brown, LR; Marsalek, J	Causes of toxicity to Hyalella azteca in a stormwater management facility receiving highway runoff and snowmelt. Part II: Salts, nutrients, and water quality	SCIENCE OF THE TOTAL ENVIRONMENT	2012	10.1016/j.scitotenv.2011.11.036	removed	nutrient
Houle, JJ; Roseen, RM; Ballestero, TP; Puls, TA; Sherrard, J	Comparison of Maintenance Cost, Labor Demands, and System Performance for LID and Conventional Stormwater Management	JOURNAL OF ENVIRONMENTAL ENGINEERING	2013	10.1061/(ASCE)EE.1943-7870.0000698	removed	nutrient
Jani, J; Yang, YY; Lusk, MG; Toor, GS	Composition of nitrogen in urban residential stormwater runoff: Concentrations, loads, and source characterization of nitrate and organic nitrogen	PLOS ONE	2020	10.1371/journal.pone.0229715	removed	nutrient
Lusk, MG; Chapman, K	Copper concentration data for water, sediments, and vegetation of urban stormwater ponds treated with copper sulfate algaecide	DATA IN BRIEF	2020	10.1016/j.dib.2020.105982	removed	nutrient
McAndrew, B; Ahn, C	Developing an ecosystem model of a floating wetland for water quality improvement on a stormwater pond	JOURNAL OF ENVIRONMENTAL MANAGEMENT	2017	10.1016/j.jenvman.2017.07.035	removed	nutrient
Schroer, WF; Benitez-Nelson, CR; Smith, EM; Ziolkowski, LA	Drivers of Sediment Accumulation and Nutrient Burial in Coastal Stormwater Detention Ponds, South Carolina, USA	ECOSYSTEMS	2018	10.1007/s10021-017-0207-z	read	nutrient

Newcomer Johnson, TA; Kaushal, SS; Mayer, PM; Grese, MM	Effects of stormwater management and stream restoration on watershed nitrogen retention	BIOGEOCHEMISTRY	2014	10.1007/s10533-014-9999-5	removed	nutrient
Kalev, S; Duan, SW; Toor, GS	Enriched dissolved organic carbon export from a residential stormwater pond	SCIENCE OF THE TOTAL ENVIRONMENT	2021	10.1016/j.scitotenv.2020.141773	read	nutrient
Moos, MT; Taffs, KH; Longstaff, BJ; Ginn, BK	Establishing ecological reference conditions and tracking post-application effectiveness of lanthanum-saturated bentonite clay (Phoslock®) for reducing phosphorus in aquatic systems: An applied paleolimnological approach	JOURNAL OF ENVIRONMENTAL MANAGEMENT	2014	10.1016/j.jenvman.2014.02.038	removed	nutrient
Baird, JB; Winston, RJ; Hunt, WF	Evaluating the hydrologic and water quality performance of novel infiltrating wet retention ponds	BLUE-GREEN SYSTEMS	2020	10.2166/bgs.2020.010	kept	nutrient
Schwartz, D; Sample, DJ; Grizzard, TJ	Evaluating the performance of a retrofitted stormwater wet pond for treatment of urban runoff	ENVIRONMENTAL MONITORING AND ASSESSMENT	2017	10.1007/s10661-017-5930-6	kept	nutrient
Winston, RJ; Hunt, WF; Kennedy, SG; Merriman, LS; Chandler, J; Brown, D	Evaluation of floating treatment wetlands as retrofits to existing stormwater retention ponds	ECOLOGICAL ENGINEERING	2013	10.1016/j.ecoleng.2013.01.023	removed	nutrient
Yang, Y; Zhu, DZ; Loewen, MR; Ahmed, SS; Zhang, WM; Yan, HB; van Duin, B; Mahmood, K	Evaluation of pollutant removal efficiency of urban stormwater wet ponds and the application of machine learning algorithms	SCIENCE OF THE TOTAL ENVIRONMENT	2023	10.1016/j.scitotenv.2023.167119	kept	nutrient
Wang, CY; Sample, DJ; Day, SD; Grizzard, TJ	Floating treatment wetland nutrient removal through vegetation harvest and observations from a field study	ECOLOGICAL ENGINEERING	2015	10.1016/j.ecoleng.2014.05.018	removed	nutrient
Maxwell, B; Winter, D; Birgand, F	Floating treatment wetland retrofit in a stormwater wet pond provides limited water quality improvements	ECOLOGICAL ENGINEERING	2020	10.1016/j.ecoleng.2020.105784	removed	nutrient
Janke, BD; Finlay, JC; Taguchi, VJ; Gulliver, JS	Hydrologic processes regulate nutrient retention in stormwater detention ponds	SCIENCE OF THE TOTAL ENVIRONMENT	2022	10.1016/j.scitotenv.2022.153722	read	nutrient

Hathaway, JM; Hunt, WF; Jadlocki, S	Indicator Bacteria Removal in Storm-Water Best Management Practices in Charlotte, North Carolina	JOURNAL OF ENVIRONMENTAL ENGINEERING-ASCE	2009	10.1061/(ASCE)EE.1943-7870.0000107	removed	nutrient
Hohman, SP; Smyth, AR; Bean, EZ; Reisinger, AJ	Internal nitrogen dynamics in stormwater pond sediments are influenced by pond age and inorganic nitrogen availability	BIOGEOCHEMISTRY	2021	10.1007/s10533-021-00843-2	read	nutrient
Tharp, R; Westhelle, K; Hurley, S	Macrophyte performance in floating treatment wetlands on a suburban stormwater pond: Implications for cold climate conditions	ECOLOGICAL ENGINEERING	2019	10.1016/j.ecoleng.2019.06.011	removed	nutrient
McAndrew, B; Ahn, C; Spooner, J	Nitrogen and Sediment Capture of a Floating Treatment Wetland on an Urban Stormwater Retention Pond-The Case of the Rain Project	SUSTAINABILITY	2016	10.3390/su8100972	removed	nutrient
Xavier, MLM; Janzen, JG; Nepf, H	Numerical modeling study to compare the nutrient removal potential of different floating treatment island configurations in a stormwater pond	ECOLOGICAL ENGINEERING	2018	10.1016/j.ecoleng.2017.11.022	removed	nutrient
Troitsky, B; Zhu, DZ; Loewen, M; van Duin, B; Mahmood, K	Nutrient processes and modeling in urban stormwater ponds and constructed wetlands	CANADIAN WATER RESOURCES JOURNAL	2019	10.1080/07011784.2019.1594390	read	nutrient
Ryan, P; Wanielista, M; Chang, NB	Nutrient Reduction in Stormwater Pond Discharge Using a Chamber Upflow Filter and Skimmer (CUFS)	WATER AIR AND SOIL POLLUTION	2010	10.1007/s11270-009-0174-x	removed	nutrient
Eckert, K; Brown, CJ; McGrath, G; Wood, S	Nutrient removal in a wet detention pond with baffle dike - a case study of the cedar river project	ENVIRONMENTAL ENGINEERING AND MANAGEMENT JOURNAL	2018		removed	nutrient
Collins, KA; Lawrence, TJ; Stander, EK; Jontos, RJ; Kaushal, SS; Newcomer, TA; Grimm, NB; Ekberg, MLC	Opportunities and challenges for managing nitrogen in urban stormwater: A review and synthesis	ECOLOGICAL ENGINEERING	2010	10.1016/j.ecoleng.2010.03.015	removed	nutrient
White, SA	Plant Nutrient Uptake in Full-Scale Floating Treatment Wetlands in a Florida Stormwater Pond: 2016-2020	WATER	2021	10.3390/w13040569	removed	nutrient

Mallin, MA; Ensign, SH; Wheeler, TL; Mayes, DB	Pollutant removal efficacy of three wet detention ponds	JOURNAL OF ENVIRONMENTAL QUALITY	2002	10.2134/jeq2002.0654	kept	nutrient
Nyström, F; Herrmann, I; Hedström, A; Viklander, M	Polymer-assisted hydraulic dredging for quality control of stormwater pond sediment and reject water - Influence of polymer choice and its preparation	JOURNAL OF WATER PROCESS ENGINEERING	2023	10.1016/j.jwpe.2022.103463	removed	nutrient
Schwammberger, PF; Yule, CM; Tindale, NW	Rapid plant responses following relocation of a constructed floating wetland from a construction site into an urban stormwater retention pond	SCIENCE OF THE TOTAL ENVIRONMENT	2020	10.1016/j.scitotenv.2019.134372	removed	nutrient
Blaszczak, JR; Steele, MK; Badgley, BD; Heffernan, JB; Hobbie, SE; Morse, JL; Rivers, EN; Hall, SJ; Neill, C; Pataki, DE; Groffman, PM; Bernhardt, ES	Sediment chemistry of urban stormwater ponds and controls on denitrification	ECOSPHERE	2018	10.1002/ecs2.2318	read	nutrient
Sinclair, JS; Reisinger, AJ; Bean, E; Adams, CR; Reisinger, LS; Iannone, BV	Stormwater ponds: An overlooked but plentiful urban designer ecosystem provides invasive plant habitat in a subtropical region (Florida, USA)	SCIENCE OF THE TOTAL ENVIRONMENT	2020	10.1016/j.scitotenv.2019.135133	removed	nutrient
Larm, T	Stormwater quantity and quality in a multiple pond-wetland system: Flemingsbergsviken case study	ECOLOGICAL ENGINEERING	2000	10.1016/S0925-8574(99)00035-X	removed	nutrient
Marimon, ZA; Xuan, ZM; Chang, NB	System dynamics modeling with sensitivity analysis for floating treatment wetlands in a stormwater wet pond	ECOLOGICAL MODELLING	2013	10.1016/j.ecolmodel.2013.07.017	removed	nutrient
Gold, AC; Thompson, SP; Piehler, MF	The Effects of Urbanization and Retention-Based Stormwater Management on Coastal plain Stream Nutrient Export	WATER RESOURCES RESEARCH	2019	10.1029/2019WR024769	read	nutrient
Song, K; Xenopoulos, MA; Marsalek, J; Frost, PC	The fingerprints of urban nutrients: dynamics of phosphorus speciation in water flowing through developed landscapes	BIOGEOCHEMISTRY	2015	10.1007/s10533-015-0114-3	read	nutrient

	Urakawa, H; Dettmar, DL; Thomas, S	The uniqueness and biogeochemical cycling of plant root microbial communities in a floating treatment wetland	ECOLOGICAL ENGINEERING	2017	10.1016/j.ecoleng.2017.06.066	removed	nutrient
	Song, K; Xenopoulos, MA; Buttle, JM; Marsalek, J; Wagner, ND; Pick, FR; Frost, PC	Thermal stratification patterns in urban ponds and their relationships with vertical nutrient gradients	JOURNAL OF ENVIRONMENTAL MANAGEMENT	2013	10.1016/j.jenvman.2013.05.052	kept	nutrient
	Serrano, L; DeLorenzo, ME	Water quality and restoration in a coastal subdivision stormwater pond	JOURNAL OF ENVIRONMENTAL MANAGEMENT	2008	10.1016/j.jenvman.2007.01.025	read	nutrient
	Gold, AC; Thompson, SP; Piehler, MF	Water quality before and after watershed-scale implementation of stormwater wet ponds in the coastal plain	ECOLOGICAL ENGINEERING	2017	10.1016/j.ecoleng.2017.05.003	kept	nutrient
Physical	Larm, T; Wahlsten, A; Marsalek, J; Viklander, M	A Data-Driven Approach to Stormwater Quality Analysis in Two Urban Catchments	SUSTAINABILITY	2022	10.3390/su14052888	removed	sediment
	Allafchi, F; Valeo, C; He, JN; Neumann, N	A mechanistic model for estimating bacteria levels in stormwater ponds	JOURNAL OF HYDRO-ENVIRONMENT RESEARCH	2021	10.1016/j.jher.2021.06.002	removed	sediment
	Phelps, HL	Active biomonitoring with Corbicula for USEPA priority pollutant and metal sources in the Anacostia River (DC, Maryland, USA)	INTEGRATED ENVIRONMENTAL ASSESSMENT AND MANAGEMENT	2016	10.1002/ieam.1701	removed	sediment
	Williams, CJ; Frost, PC; Ginn, BK; Marsalek, J; Xenopoulos, MA	Add a dash of salt? Effects of road de-icing salt (NaCl) on benthic respiration and nutrient fluxes in freshwater sediments	LIMNETICA	2023	10.23818/limn.42.17	removed	sediment
	Olding, DD	Algal communities as a biological indicator of stormwater management pond performance and function	WATER QUALITY RESEARCH JOURNAL OF CANADA	2000	10.2166/wqrj.2000.029	removed	sediment
	Haghighatafshar, S; Hallinger, E; Espinoza, D; Al-Rudainy, B	An innovative method for estimating settling velocity of particles in stormwater using absorbance measurements and modelling	WATER PRACTICE AND TECHNOLOGY	2024	10.2166/wpt.2024.040	kept	sediment
	Allafchi, F; Valeo, C; He, JX; Neumann, NF	An Integrated Hydrological-CFD Model for Estimating Bacterial Levels in Stormwater Ponds	WATER	2019	10.3390/w11051016	removed	sediment

Marsalek, J; Rochfort, Q; Grapentine, L; Brownlee, B	Assessment of stormwater impacts on an urban stream with a detention pond	WATER SCIENCE AND TECHNOLOGY	2002	10.2166/wst.2002.0086	removed	sediment
Ivanovsky, A; Belles, A; Criquet, J; Dumoulin, D; Noble, P; Alary, C; Billon, G	Assessment of the treatment efficiency of an urban stormwater pond and its impact on the natural downstream watercourse	JOURNAL OF ENVIRONMENTAL MANAGEMENT	2018	10.1016/j.jenvman.2018.08.015	removed	sediment
Droppo, IG	Biofilm structure and bed stability of five contrasting freshwater sediments	MARINE AND FRESHWATER RESEARCH	2009	10.1071/MF08019	removed	sediment
Mothersill, CL; Anderson, BC; Watt, WE; Marsalek, J	Biological filtration of stormwater: Field operations and maintenance experiences	WATER QUALITY RESEARCH JOURNAL OF CANADA	2000	10.2166/wqrj.2000.032	removed	sediment
Bartlett, AJ; Rochfort, Q; Brown, LR; Marsalek, J	Causes of toxicity to Hyalella azteca in a stormwater management facility receiving highway runoff and snowmelt. Part I: Polycyclic aromatic hydrocarbons and metals	SCIENCE OF THE TOTAL ENVIRONMENT	2012	10.1016/j.scitotenv.2011.11.041	removed	sediment
Marsalek, J; Marsalek, PM	Characteristics of sediments from a stormwater management pond	WATER SCIENCE AND TECHNOLOGY	1997	10.2166/wst.1997.0653	kept	sediment
Marsalek, J; Marsalek, PM	Characteristics of sediments from a stormwater management pond	WATER SCIENCE AND TECHNOLOGY	1997	10.2166/wst.1997.0653	removed	sediment
Camponelli, KM; Lev, SM; Snodgrass, JW; Landa, ER; Casey, RE	Chemical fractionation of Cu and Zn in stormwater, roadway dust and stormwater pond sediments	ENVIRONMENTAL POLLUTION	2010	10.1016/j.envpol.2010.02.024	removed	sediment
Gold, AC; Thompson, SP; Piehler, MF	Coastal stormwater wet pond sediment nitrogen dynamics	SCIENCE OF THE TOTAL ENVIRONMENT	2017	10.1016/j.scitotenv.2017.07.213	removed	sediment
Bishop, CA; Struger, J; Shirose, LJ; Dunn, L; Campbell, GD	Contamination and wildlife communities in stormwater detention ponds in Guelph and the Greater Toronto Area, Ontario, 1997 and 1998. Part II - Contamination and biological effects of contamination	WATER QUALITY RESEARCH JOURNAL OF CANADA	2000	10.2166/wqrj.2000.027	removed	sediment
Flanagan, K; Blecken, GT; Österlund, H; Nordqvist, K; Viklander, M	Contamination of Urban Stormwater Pond Sediments: A Study of 259 Legacy and Contemporary Organic Substances	ENVIRONMENTAL SCIENCE & TECHNOLOGY	2021	10.1021/acs.est.0c07782	removed	sediment

Crane, JL	Distribution, Toxic Potential, and Influence of Land Use on Conventional and Emerging Contaminants in Urban Stormwater Pond Sediments	ARCHIVES OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY	2019	10.1007/s00244-019-00598-w	removed	sediment
Schroer, WF; Benitez-Nelson, CR; Smith, EM; Ziolkowski, LA	Drivers of Sediment Accumulation and Nutrient Burial in Coastal Stormwater Detention Ponds, South Carolina, USA	ECOSYSTEMS	2018	10.1007/s10021-017-0207-z	kept	sediment
Tixier, G; Lafont, M; Grapentine, L; Rochfort, Q; Marsalek, J	Ecological risk assessment of urban stormwater ponds: Literature review and proposal of a new conceptual approach providing ecological quality goals and the associated bioassessment tools	ECOLOGICAL INDICATORS	2011	10.1016/j.ecolind.2011.03.027	removed	sediment
Milovanovic, I; Bares, V; Hedström, A; Herrmann, I; Picek, T; Marsalek, J; Viklander, M	Enhancing stormwater sediment settling at detention pond inlets by a bottom grid structure (BGS)	WATER SCIENCE AND TECHNOLOGY	2020	10.2166/wst.2020.101	kept	sediment
Moos, MT; Taffs, KH; Longstaff, BJ; Ginn, BK	Establishing ecological reference conditions and tracking post-application effectiveness of lanthanum-saturated bentonite clay (Phoslock®) for reducing phosphorus in aquatic systems: An applied paleolimnological approach	JOURNAL OF ENVIRONMENTAL MANAGEMENT	2014	10.1016/j.jenvman.2014.02.038	removed	sediment
Schwartz, D; Sample, DJ; Grizzard, TJ	Evaluating the performance of a retrofitted stormwater wet pond for treatment of urban runoff	ENVIRONMENTAL MONITORING AND ASSESSMENT	2017	10.1007/s10661-017-5930-6	kept	sediment
Yang, Y; Zhu, DZ; Loewen, MR; Ahmed, SS; Zhang, WM; Yan, HB; van Duin, B; Mahmood, K	Evaluation of pollutant removal efficiency of urban stormwater wet ponds and the application of machine learning algorithms	SCIENCE OF THE TOTAL ENVIRONMENT	2023	10.1016/j.scitotenv.2023.167119	kept	sediment
Gavric, S; Flanagan, K; Österlund, H; Blecken, GT; Viklander, M	Facilitating maintenance of stormwater ponds: comparison of analytical methods for determination of metal pollution	ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH	2022	10.1007/s11356-022-20694-0	removed	sediment

Krometis, LAH; Drummey, PN; Characklis, GW; Sobsey, MD	Impact of Microbial Partitioning on Wet Retention Pond Effectiveness	JOURNAL OF ENVIRONMENTAL ENGINEERING-ASCE	2009	10.1061/(ASCE)EE.1943-7870.0000040	removed	sediment
Andradóttir, HO	Impact of Wind on Stormwater Pond Particulate Removal	JOURNAL OF ENVIRONMENTAL ENGINEERING	2017	10.1061/(ASCE)EE.1943-7870.0001221	kept	sediment
Tixier, G; Rochfort, Q; Grapentine, L; Marsalek, J; Lafont, M	In search of effective bioassessment of urban stormwater pond sediments: enhancing the 'sediment quality triad' approach with oligochaete metrics	WATER SCIENCE AND TECHNOLOGY	2011	10.2166/wst.2011.155	removed	sediment
Tillinghast, ED; Hunt, WF; Jennings, GD; D'Arconte, P	Increasing Stream Geomorphic Stability Using Storm Water Control Measures in a Densely Urbanized Watershed	JOURNAL OF HYDROLOGIC ENGINEERING	2012	10.1061/(ASCE)HE.1943-5584.0000577	removed	sediment
Greb, SR; Bannerman, RT	Influence of particle size on wet pond effectiveness	WATER ENVIRONMENT RESEARCH	1997	10.2175/106143097X125876	kept	sediment
Hohman, SP; Smyth, AR; Bean, EZ; Reisinger, AJ	Internal nitrogen dynamics in stormwater pond sediments are influenced by pond age and inorganic nitrogen availability	BIOGEOCHEMISTRY	2021	10.1007/s10533-021-00843-2	removed	sediment
Li, H	Investigation of Highway Stormwater Management Pond Capacity for Flood Detention and Water Quality Treatment Retention via Remote Sensing Data and Conventional Topographic Survey	TRANSPORTATION RESEARCH RECORD	2020	10.1177/0361198120923658	removed	sediment
Brand, AB; Snodgrass, JW; Gallagher, MT; Casey, RE; Van Meter, R	Lethal and Sublethal Effects of Embryonic and Larval Exposure of Hyla versicolor to Stormwater Pond Sediments	ARCHIVES OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY	2010	10.1007/s00244-009-9373-0	removed	sediment
Drake, J; Guo, YP	Maintenance of Wet Stormwater Ponds in Ontario	CANADIAN WATER RESOURCES JOURNAL	2008	10.4296/cwrj3304351	removed	sediment
Snodgrass, JW; Casey, RE; Joseph, D; Simon, JA	Microcosm investigations of stormwater pond sediment toxicity to embryonic and larval amphibians: Variation in sensitivity among species	ENVIRONMENTAL POLLUTION	2008	10.1016/j.envpol.2007.10.003	removed	sediment

Krishnappan, BG; Marsalek, J	Modelling of flocculation and transport of cohesive sediment from an on-stream stormwater detention pond	WATER RESEARCH	2002	10.1016/S0043-1354(02)00087-8	kept	sediment
Krishnappan, BG; Marsalek, J	Modelling of flocculation and transport of cohesive sediment from an on-stream stormwater detention pond	WATER RESEARCH	2002	10.1016/S0043-1354(02)00087-8	removed	sediment
Ahilan, S; Guan, MF; Wright, N; Sleigh, A; Allen, D; Arthur, S; Haynes, H; Krivtsov, V	Modelling the long-term suspended sedimentological effects on stormwater pond performance in an urban catchment	JOURNAL OF HYDROLOGY	2019	10.1016/j.jhydrol.2019.02.002	kept	sediment
McAndrew, B; Ahn, C; Spooner, J	Nitrogen and Sediment Capture of a Floating Treatment Wetland on an Urban Stormwater Retention Pond-The Case of the Rain Project	SUSTAINABILITY	2016	10.3390/su8100972	removed	sediment
Guan, MF; Ahilan, S; Yu, D; Peng, Y; Wright, N	Numerical modelling of hydro-morphological processes dominated by fine suspended sediment in a stormwater pond	JOURNAL OF HYDROLOGY	2018	10.1016/j.jhydrol.2017.11.006	kept	sediment
Troitsky, B; Zhu, DZ; Loewen, M; van Duin, B; Mahmood, K	Nutrient processes and modeling in urban stormwater ponds and constructed wetlands	CANADIAN WATER RESOURCES JOURNAL	2019	10.1080/07011784.2019.1594390	removed	sediment
Song, K; Winters, C; Xenopoulos, MA; Marsalek, J; Frost, PC	Phosphorus cycling in urban aquatic ecosystems: connecting biological processes and water chemistry to sediment P fractions in urban stormwater management ponds	BIOGEOCHEMISTRY	2017	10.1007/s10533-017-0293-1	removed	sediment
Austin, D; Liao, HH; Scharf, R	Phosphorus solubilization in stormwater ponds: rapid field assessment to identify ponds with excessive total phosphorus concentrations	ENVIRONMENTAL SCIENCE-WATER RESEARCH & TECHNOLOGY	2021	10.1039/d1ew00413a	removed	sediment
Nyström, F; Herrmann, I; Hedström, A; Viklander, M	Polymer-assisted hydraulic dredging for quality control of stormwater pond sediment and reject water - Influence of polymer choice and its preparation	JOURNAL OF WATER PROCESS ENGINEERING	2023	10.1016/j.jwpe.2022.103463	removed	sediment

Alrabie, NA; Mohamat-Yusuff, F; Rohasliney, H; Zulkeflee, Z; Amal, MNA; Arshad, A; Zulkifli, SZ; Wijaya, AR; Masood, N; Sani, MSA	Preliminary Evaluation of Heavy Metal Contamination and Source Identification in Kuala Lumpur SMART Stormwater Pond Sediments Using Pb Isotopic Signature	SUSTAINABILITY	2021	10.3390/su13169020	removed	sediment
Blaszczak, JR; Steele, MK; Badgley, BD; Heffernan, JB; Hobbie, SE; Morse, JL; Rivers, EN; Hall, SJ; Neill, C; Pataki, DE; Groffman, PM; Bernhardt, ES	Sediment chemistry of urban stormwater ponds and controls on denitrification	ECOSPHERE	2018	10.1002/ecs2.2318	removed	sediment
Crane, JL	Source Apportionment and Distribution of Polycyclic Aromatic Hydrocarbons, Risk Considerations, and Management Implications for Urban Stormwater Pond Sediments in Minnesota, USA	ARCHIVES OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY	2014	10.1007/s00244-013-9963-8	removed	sediment
Tixier, G; Rochfort, Q; Grapentine, L; Marsalek, J; Lafont, M	Spatial and seasonal toxicity in a stormwater management facility: Evidence obtained by adapting an integrated sediment quality assessment approach	WATER RESEARCH	2012	10.1016/j.watres.2011.12.031	removed	sediment
Brown, AS; Yun, XY; McKenzie, ER; Heron, CG; Field, JA; Salice, CJ	Spatial and temporal variability of per- and polyfluoroalkyl substances (PFAS) in environmental media of a small pond: Toward an improved understanding of PFAS bioaccumulation in fish	SCIENCE OF THE TOTAL ENVIRONMENT	2023	10.1016/j.scitotenv.2023.163149	removed	sediment
Smiley, AMH; Thompson, SP; Hall, NS; Piehler, MF	Storm characteristics influence nitrogen removal in an urban estuarine environment	NATURAL HAZARDS AND EARTH SYSTEM SCIENCES	2023	10.5194/nhess-23-3635-2023	removed	sediment
Tillinghast, ED; Hunt, WF; Jennings, GD	Stormwater control measure (SCM) design standards to limit stream erosion for Piedmont North Carolina	JOURNAL OF HYDROLOGY	2011	10.1016/j.jhydrol.2011.09.027	removed	sediment
Canfield, DC; Thomas, S; Rotz, RR; Missimer, TM	Stormwater Pond Evolution and Challenges in Measuring the Hydraulic Conductivity of Pond Sediments	WATER	2023	10.3390/w15061122	removed	sediment

Gregory, MA	Stormwater Pond Sediment Loading and Accumulation Analysis	JOURNAL OF WATER MANAGEMENT MODELING	2014	10.14796/JWMM.C378	kept	sediment
Karlsson, K; German, J; Viklander, M	Stormwater Pond Sediments: Temporal Trends in Heavy Metal Concentrations and Sediment Removal	SOIL & SEDIMENT CONTAMINATION	2010	10.1080/15320380903548490	removed	sediment
Wu, JS; Holman, RE; Dorney, JR	Systematic evaluation of pollutant removal by urban wet detention ponds	JOURNAL OF ENVIRONMENTAL ENGINEERING-ASCE	1996	10.1061/(ASCE)0733-9372(1996)122:11(983)	kept	sediment
da Silva, EP; Antoniosi, NR; Pereira, J; Formiga, KTM	Temporal variation and risk assessment of heavy metals and nutrients from water and sediment in a stormwater pond, Brazil	WATER SUPPLY	2023	10.2166/ws.2022.441	removed	sediment
Song, K; Xenopoulos, MA; Buttle, JM; Marsalek, J; Wagner, ND; Pick, FR; Frost, PC	Thermal stratification patterns in urban ponds and their relationships with vertical nutrient gradients	JOURNAL OF ENVIRONMENTAL MANAGEMENT	2013	10.1016/j.jenvman.2013.05.052	removed	sediment
Tixier, G; Rochfort, Q; Grapentine, L; Marsalek, J; Lafont, M; Vivien, R	Toxicity of sediments in eight urban stormwater management ponds: bioassessment by an oligochaete community metrics used in the sediment quality triad	WATER SCIENCE AND TECHNOLOGY	2023	10.2166/wst.2023.051	removed	sediment
Marsalek, J; Watt, WE; Anderson, BC	Trace metal levels in sediments deposited in urban stormwater management facilities	WATER SCIENCE AND TECHNOLOGY	2006	10.2166/wst.2006.051	removed	sediment
Olmsted, JL; Ahmadireskety, A; Da Silva, BF; Robey, N; Aristizabal-Henao, JJ; Bonzongo, JCJ; Bowden, JA	Using Regulatory Classifications to Assess the Impact of Different Land Use Types on Per- and Polyfluoroalkyl Substance Concentrations in Stormwater Pond Sediments	JOURNAL OF ENVIRONMENTAL ENGINEERING	2021	10.1061/(ASCE)EE.1943-7870.0001906	removed	sediment
Marsalek, PM; Watt, WE; Marsalek, J; Anderson, BC	Winter flow dynamics of an on-stream stormwater management pond	WATER QUALITY RESEARCH JOURNAL OF CANADA	2000	10.2166/wqrj.2000.030	removed	sediment
Marsalek, PM; Watt, WE; Marsalek, J; Anderson, BC	Winter operation of an on-stream stormwater management pond	WATER SCIENCE AND TECHNOLOGY	2003	10.2166/wst.2003.0510	removed	sediment

DeLorenzo, ME; Thompson, B; Cooper, E; Moore, J; Fulton, MH	A long-term monitoring study of chlorophyll, microbial contaminants, and pesticides in a coastal residential stormwater pond and its adjacent tidal creek	ENVIRONMENTAL MONITORING AND ASSESSMENT	2012	10.1007/s10661-011-1972-3	removed	temperature
Lusk, MG; Chapman, K	Copper concentration data for water, sediments, and vegetation of urban stormwater ponds treated with copper sulfate algaecide	DATA IN BRIEF	2020	10.1016/j.dib.2020.105982	removed	temperature
Jones, MP; Hunt, WF	Effect of Storm-Water Wetlands and Wet Ponds on Runoff Temperature in Trout Sensitive Waters	JOURNAL OF IRRIGATION AND DRAINAGE ENGINEERING	2010	10.1061/(ASCE)IR.1943-4774.0000227	removed	temperature
Winston, RJ; Hunt, WF; Kennedy, SG; Merriman, LS; Chandler, J; Brown, D	Evaluation of floating treatment wetlands as retrofits to existing stormwater retention ponds	ECOLOGICAL ENGINEERING	2013	10.1016/j.ecoleng.2013.01.023	removed	temperature
Sabouri, F; Gharabaghi, B; Sattar, AMA; Thompson, AM	Event-based stormwater management pond runoff temperature model	JOURNAL OF HYDROLOGY	2016	10.1016/j.jhydrol.2016.06.017	removed	temperature
Ahmed, SS; Loewen, MR; Zhang, WM; Ghobrial, TR; Zhu, DZ; Mahmood, K; van Duin, B	Field observations of stratification in stormwater wet ponds	JOURNAL OF ENVIRONMENTAL MANAGEMENT	2022	10.1016/j.jenvman.2022.115988	kept	temperature
Borne, KE; Fassman, EA; Tanner, CC	Floating treatment wetland retrofit to improve stormwater pond performance for suspended solids, copper and zinc	ECOLOGICAL ENGINEERING	2013	10.1016/j.ecoleng.2013.01.031	removed	temperature
She, YT; Kemp, J; Richards, L; Loewen, M	Investigation into freezing point depression in stormwater ponds caused by road salt	COLD REGIONS SCIENCE AND TECHNOLOGY	2016	10.1016/j.coldregions.2016.09.003	kept	temperature
Stajkowski, S; Hotson, E; Zorica, M; Farghaly, H; Bonakdari, H; McBean, E; Gharabaghi, B	Modeling stormwater management pond thermal impacts during storm events	JOURNAL OF HYDROLOGY	2023	10.1016/j.jhydrol.2023.129413	kept	temperature
Stajkowski, S; Hotson, E; Zorica, M; Farghaly, H; Bonakdari, H; McBean, E; Gharabaghi, B	Modeling stormwater management pond thermal impacts during storm events	JOURNAL OF HYDROLOGY	2023	10.1016/j.jhydrol.2023.129413	kept	temperature

German, J; Svensson, G; Gustafsson, LG; Vikström, M	Modelling of temperature effects on removal efficiency and dissolved oxygen concentrations in stormwater ponds	WATER SCIENCE AND TECHNOLOGY	2003	10.2166/wst.2003.0513	removed	temperature
Mahmoud, SH; Ahmed, SS; Zhu, DZ; Loewen, MR; van Duin, B; Mahmood, K	Monitoring the spatial distribution of water quality of an urban stormwater pond using satellite images	ECOLOGICAL INFORMATICS	2023	10.1016/j.ecoinf.2023.102205	kept	temperature
Sarwar, A; Nayyar, BG; Irshad, H; Anwar, P; Olihk, N; Ajmal, M	Mycofiltration of Heavy Metals (Pb, Cd, Hg) from Aqueous Solution by Living Biomass of Two Mushrooms Pleurotus ostreatus and Agaricus bisporus as Biosorbents	JOURNAL OF WATER CHEMISTRY AND TECHNOLOGY	2023	10.3103/S1063455X23060097	removed	temperature
Troitsky, B; Zhu, DZ; Loewen, M; van Duin, B; Mahmood, K	Nutrient processes and modeling in urban stormwater ponds and constructed wetlands	CANADIAN WATER RESOURCES JOURNAL	2019	10.1080/07011784.2019.1594390	kept	temperature
Krompart, J; Cockburn, JMH; Villard, PV	Pocket wetlands as additions to stormwater treatment train systems: a case study from a restored stream in Brampton, ON, Canada	CANADIAN WATER RESOURCES JOURNAL	2018	10.1080/07011784.2018.1459863	removed	temperature
McManamay, RA; Young, JT; Orth, DJ	Spawning of White Sucker (Catostomus commersoni) in a Stormwater Pond Inlet	AMERICAN MIDLAND NATURALIST	2012		removed	temperature
Hester, ET; Bauman, KS	Stream and Retention Pond Thermal Response to Heated Summer Runoff From Urban Impervious Surfaces	JOURNAL OF THE AMERICAN WATER RESOURCES ASSOCIATION	2013	10.1111/jawr.12019	removed	temperature
Szewczyk, CJ; Smith, EM; Benitez-Nelson, CR	Temperature sensitivity of oxygen demand varies as a function of organic matter source	FRONTIERS IN MARINE SCIENCE	2023	10.3389/fmars.2023.1133336	removed	temperature
Janssen, E; Van Seters, T	Thermal Mitigation of Stormwater Management Pond Outflows Using Geothermal Cooling	JOURNAL OF WATER MANAGEMENT MODELING	2022	10.14796/JWMM.C483	removed	temperature
Song, K; Xenopoulos, MA; Buttle, JM; Marsalek, J; Wagner, ND; Pick, FR; Frost, PC	Thermal stratification patterns in urban ponds and their relationships with vertical nutrient gradients	JOURNAL OF ENVIRONMENTAL MANAGEMENT	2013	10.1016/j.jenvman.2013.05.052	kept	temperature

Sattar, AMA; Gharabaghi, B; Sabouri, F; Thompson, AM	Urban stormwater thermal gene expression models for protection of sensitive receiving streams	HYDROLOGICAL PROCESSES	2017	10.1002/hyp.11170	removed	temperature
He, JX; Valeo, C; Chu, A; Neumann, NF	Water Quality Assessment in the Application of Stormwater Reuse for Irrigating Public Lands	WATER QUALITY RESEARCH JOURNAL OF CANADA	2008	10.2166/wqrj.2008.018	removed	temperature
Marsalek, PM; Watt, WE; Marsalek, J; Anderson, BC	Winter operation of an on-stream stormwater management pond	WATER SCIENCE AND TECHNOLOGY	2003	10.2166/wst.2003.0510	removed	temperature
Semadeni-Davies, A	Winter performance of an urban stormwater pond in southern Sweden	HYDROLOGICAL PROCESSES	2006	10.1002/hyp.5909	kept	temperature

Table S2. Data charting of the studies retained following our screening process.

Authors	Article title	Journal	Process	Key information
Sinclair, JS; Adams, CR; Reisinger, AJ; Bean, E; Reisinger, LS; Holmes, AL; Iannone, BV	High similarity and management-driven differences in the traits of a diverse pool of invasive stormwater pond plants	LANDSCAPE AND URBAN PLANNING	biodiversity	Plants that invade SWMPs share similar traits that differ from other urban dwellers. Management is related to shifts from disturbance tolerant to competitive invasive plants
Minelgaite, G; Frost, PC; Xenopoulos, MA; Stephansen, DA; Fejerskov, ML; Vollertsen, J	Planktonic algae abundance and diversity are similar in urban stormwater ponds of different geographic locations and natural shallow lakes	URBAN ECOSYSTEMS	biodiversity	SWMPs have similar phytoplancton diversity as lakes. Pond communities are similar among distant geographical regions (urban homogenization).
Lenzewski, N; Jensen, K; Ludewig, K	Seed bank has the potential for re-colonising urban stormwater ponds after reconstruction	HYDROBIOLOGIA	biodiversity	SWMPs can have a thriving seed bank with potential for natural recolonization following reconstruction.
Mckercher, LJ; Kimball, ME; Scaroni, AE; White, SA; Strosnider, WHJ	Stormwater ponds serve as variable quality habitat for diverse taxa	WETLANDS ECOLOGY AND MANAGEMENT	biodiversity	SWMPs can support populations of multiple taxa, including native (threatened and endangered) and non-native species or serve as ecological traps. Such diversity can be controled by water quality and hydrology.
Sinclair, JS; Reisinger, AJ; Bean, E; Adams, CR; Reisinger, LS; Iannone, BV	Stormwater ponds: an overlooked but plentiful urban designer ecosystem provides invasive plant habitat in a subtropical region (Florida, USA)	SCIENCE OF THE TOTAL ENVIRONMENT	biodiversity	SWMP can favor invasion harboring a high nuumber of invasive plant species. Invasion severity is related to pond design and management strategy.

Tixier, G; Rochfort, Q; Grapentine, L; Marsalek, J; Lafont, M; Vivien, R	Toxicity of sediments in eight urban stormwater management ponds: bioassessment by an oligochaete community metrics used in the sediment quality triad	WATER SCIENCE AND TECHNOLOGY	biodiversity	Usee of oligochaete biodiversity index in SWMPs. Heavy metals in the sediment and chloride in interstitial water are responsible for detrimental effects to SWMP biota.
Sinclair, JS; Reisinger, LS; Adams, CR; Bean, E; Reisinger, AJ; Iannone, BV	Vegetation management and benthic macroinvertebrate communities in urban stormwater ponds: implications for regional biodiversity	URBAN ECOSYSTEMS	biodiversity	Vegetation management affects macroinvertebrate diversity.
DeLorenzo, ME; Thompson, B; Cooper, E; Moore, J; Fulton, MH	A long-term monitoring study of chlorophyll, microbial contaminants, and pesticides in a coastal residential stormwater pond and its adjacent tidal creek	ENVIRONMENTAL MONITORING AND ASSESSMENT	contamination	SWMPs can be contaminatd with fecal coliforms, pesticides and fertilizers. Such contaminants can vary seasonally.
Anderson, BC; Bell, T; Hodson, P; Marsalek, J; Watt, WE	Accumulation of trace metals in freshwater invertebrates in stormwater management facilities	WATER QUALITY RESEARCH JOURNAL OF CANADA	contamination	Metals such as Nickel, Cromium, and Cadmium are likely not bioavailable in SWMPs and do not bioacumulate in mussels. Contrarily, lead can bioaccumulate.
Allafchi, F; Valeo, C; He, JX; Neumann, NF	An Integrated Hydrological-CFD Model for Estimating Bacterial Levels in Stormwater Ponds	WATER	contamination	The distribution of E. coli in a SWMP can be predicted using an integrated hydrological model.
Ivanovsky, A; Belles, A; Criquet, J; Dumoulin, D; Noble, P; Alary, C; Billon, G	Assessment of the treatment efficiency of an urban stormwater pond and its impact on the natural downstream watercourse	JOURNAL OF ENVIRONMENTAL MANAGEMENT	contamination	Contaminant removal by SWMP is important with removal efficiency varying depending on the chemical considered. There is negligible impact of the SWMP on natural downstream ecosystems.
Jang, YC; Jain, P; Tolaymat, T; Dubey, B; Singh, S; Townsend, T	Characterization of roadway stormwater system residuals for reuse and disposal options	SCIENCE OF THE TOTAL ENVIRONMENT	contamination	Sediments removed from SWMPs are contaminated with metals and organochlorides, but their concentration fall within compliance. This means that such sediemnts are not likely to pose a significant threat to human heath or the environment.
Bishop, CA; Struger, J; Shirose, LJ; Dunn, L; Campbell, GD	Contamination and wildlife communities in stormwater detention ponds in Guelph and the Greater Toronto Area, Ontario, 1997 and 1998. Part II - Contamination and biological effects of contamination	WATER QUALITY RESEARCH JOURNAL OF CANADA	contamination	Sediments from SWMPs have high concentrations of known contaminants such as PCBs, PAHs, chromium copper and lead.

Flanagan, K; Blecken, GT; Österlund, H; Nordqvist, K; Viklander, M	Contamination of Urban Stormwater Pond Sediments: A Study of 259 Legacy and Contemporary Organic Substances	ENVIRONMENTAL SCIENCE & TECHNOLOGY	contamination	The level of sediment contamination varies among SWMPs, likely as a function of the dillution of pollutants and wear particles from soil, sand and organic matter.
Gavric, S; Flanagan, K; Österlund, H; Blecken, GT; Viklander, M	Facilitating maintenance of stormwater ponds: comparison of analytical methods for determination of metal pollution	ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH	contamination	Metodologies used to measure SWMPs sediment contamination can deliver different results.
Philippe, M; Le Pape, P; Resongles, E; Landrot, G; Freydier, R; Bordier, L; Baptiste, B; Delbes, L; Baya, C; Casiot, C; Ayrault, S	Fate of antimony contamination generated by road traffic - A focus on Sb geochemistry and speciation in stormwater ponds	CHEMOSPHERE	contamination	Trafic emmission is a source of antimony to SWMPs.
Shahirnia, M; Vidrio-Sahagún, CT; He, JX; Valeo, C; van Duin, B; Beaudry, M; Neumann, NF	Land use and rainfall influences on bacterial levels and sources in stormwater ponds	ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH	contamination	SWMPs draining comercial lands are more contaminated with E.coli and thermotolerant colifforms than SWMPs draining residential lands. The level of contamination is further modulated by rain and dry periods.
Pettersson, TJR; Åström, J	Microbial Contaminants Removal in a Stormwater Pond	HIGHWAY AND URBAN ENVIRONMENT	contamination	SWMPs perform well for the removal of suspended solids, some nutrients and heavy metals, while performing pooly for the removal of faecal bacteria.
Alrabie, NA; Mohamat-Yusuff, F; Rohasliney, H; Zulkeflee, Z; Amal, MNA; Arshad, A; Zulkifli, SZ; Wijaya, AR; Masood, N; Sani, MSA	Preliminary Evaluation of Heavy Metal Contamination and Source Identification in Kuala Lumpur SMART Stormwater Pond Sediments Using Pb Isotopic Signature	SUSTAINABILITY	contamination	Heavy metals such as Arsenic, Cadmium, Lead and Zinc can dominate SWMPs sediments
Crane, JL	Source Apportionment and Distribution of Polycyclic Aromatic Hydrocarbons, Risk Considerations, and Management Implications for Urban Stormwater Pond Sediments in Minnesota, USA	ARCHIVES OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY	contamination	SWMPs are contaminated with PAHs. Common sources of contamination are likely coal tar-based sealant, vehicle emmissions and wood combustion.
Brown, AS; Yun, XY; McKenzie, ER; Heron, CG; Field, JA; Salice, CJ	Spatial and temporal variability of per- and polyfluoroalkyl substances (PFAS) in environmental media of a small pond: Toward an improved understanding of PFAS bioaccumulation in fish	SCIENCE OF THE TOTAL ENVIRONMENT	contamination	SWMPs can be contaminated with PFAS in surface water and sediments with marked spatial and temporal variation.
da Silva, EP; Antoniosi, NR; Pereira, J; Formiga, KTM	Temporal variation and risk assessment of heavy metals and nutrients from water and sediment in a stormwater pond, Brazil	WATER SUPPLY	contamination	SWMPs can be contaminated with multiple metals in both water and sediments. The conncentration of such metals is related to seasonality, physico and chemical factors.

Olmsted, JL; Ahmadireskety, A; Da Silva, BF; Robey, N; Aristizabal-Henao, JJ; Bonzongo, JCJ; Bowden, JA	Using Regulatory Classifications to Assess the Impact of Different Land Use Types on Per- and Polyfluoroalkyl Substance Concentrations in Stormwater Pond Sediments	JOURNAL OF ENVIRONMENTAL ENGINEERING	contamination	Contamination of SWMPs with PFAS is related to road type.
Serrano, L; DeLorenzo, ME	Water quality and restoration in a coastal subdivision stormwater pond	JOURNAL OF ENVIRONMENTAL MANAGEMENT	contamination	SWMPs can be contaminated with microcystinn toxin, fecal coliforms and herbicides.
Snodgrass, JW; Casey, RE; Joseph, D; Simon, JA	Seed bank has the potential for re-colonising urban stormwater ponds after reconstruction	HYDROBIOLOGIA	habitat	SWMPs can have a thriving seed bank with potential for natural recolonization following reconstruction.
Brand, AB; Snodgrass, JW; Gallagher, MT; Casey, RE; Van Meter, R	Stormwater ponds serve as variable quality habitat for diverse taxa	WETLANDS ECOLOGY AND MANAGEMENT	habitat	Assemblages of submerged and emergent macrophytes are critical for providing habitat in SWMPs. Other factors suah as the pond desing also influence floral and faunal assembleages. Heavily maintained ponds have less biodiversity than less managed ponds.
Mckercher, LJ; Kimball, ME; Scaroni, AE; White, SA; Strosnider, WHJ	Stormwater ponds: An overlooked but plentiful urban designer ecosystem provides invasive plant habitat in a subtropical region (Florida, USA)	SCIENCE OF THE TOTAL ENVIRONMENT	habitat	SWMPs are hhabitat for a high number of invasive plant species.
Baird, JB; Winston, RJ; Hunt, WF	Evaluating the hydrologic and water quality performance of novel infiltrating wet retention ponds	BLUE-GREEN SYSTEMS	nutrient	Infiltrating SWMPs can reduce suspended solidas and, total and dissolved phosphorous loads.
Schwartz, D; Sample, DJ; Grizzard, TJ	Evaluating the performance of a retrofitted stormwater wet pond for treatment of urban runoff	ENVIRONMENTAL MONITORING AND ASSESSMENT	nutrient	Retrofitted SWMPs can significantly reduce phosphorus and nitrogen loads.
Yang, Y; Zhu, DZ; Loewen, MR; Ahmed, SS; Zhang, WM; Yan, HB; van Duin, B; Mahmood, K	Evaluation of pollutant removal efficiency of urban stormwater wet ponds and the application of machine learning algorithms	SCIENCE OF THE TOTAL ENVIRONMENT	nutrient	SWMPs nutrient removal efficiency is highly variable being influenced by inflow concentration, rainfall and wind.
Mallin, MA; Ensign, SH; Wheeler, TL; Mayes, DB	Pollutant removal efficacy of three wet detention ponds	JOURNAL OF ENVIRONMENTAL QUALITY	nutrient	SWMPs design can affect nutrient removal efficiency. Specifically, desing that maximize the contact of inflow water with rooted vegetation and organic sediments should be prioritized.
Song, K; Xenopoulos, MA; Buttle, JM; Marsalek, J; Wagner, ND; Pick, FR; Frost, PC	Thermal stratification patterns in urban ponds and their relationships with vertical nutrient gradients	JOURNAL OF ENVIRONMENTAL MANAGEMENT	nutrient	Temperature stratification is related to phosphorous stratificatioon in SWMPs, where high phosphorous concentration is found in the bottom of the ponds.

Gold, AC; Thompson, SP; Piehler, MF	Water quality before and after watershed-scale implementation of stormwater wet ponds in the coastal plain	ECOLOGICAL ENGINEERING	nutrient	Recently build SWMPs can be sinks of nitrogen compounds.
Williams, CJ; Frost, PC; Xenopoulos, MA	Beyond best management practices: pelagic biogeochemical dynamics in urban stormwater ponds	ECOLOGICAL APPLICATIONS	nutrient	Internal biogeochemical processes, can affect carbon cycling more than landscape effects in SWMPs.
Schroer, WF; Benitez-Nelson, CR; Smith, EM; Ziolkowski, LA	Drivers of Sediment Accumulation and Nutrient Burial in Coastal Stormwater Detention Ponds, South Carolina, USA	ECOSYSTEMS	nutrient	Variation in Carbon, Nitrogen and Phosphorus burrial in SWMPs is a function of bulk sediment accumulation rate.
Kalev, S; Duan, SW; Toor, GS	Enriched dissolved organic carbon export from a residential stormwater pond	SCIENCE OF THE TOTAL ENVIRONMENT	nutrient	SWMPs outflows can have higher concentration of dissolved organic carbon when compared to particullate organic carbon. The later peaks at the beginning of storm events in a "first flush" efffect.
Janke, BD; Finlay, JC; Taguchi, VJ; Gulliver, JS	Hydrologic processes regulate nutrient retention in stormwater detention ponds	SCIENCE OF THE TOTAL ENVIRONMENT	nutrient	SWMPs can be efficient in retaining nitrogen and phosphorus from stormwater.
Hohman, SP; Smyth, AR; Bean, EZ; Reisinger, AJ	Internal nitrogen dynamics in stormwater pond sediments are influenced by pond age and inorganic nitrogen availability	BIOGEOCHEMISTRY	nutrient	SWMPs have thee capacity to process acute nitrogen loading events though denitrificaion. Net nitrogen availability, pond age, and microbial activity are key drivers of such process.
Troitsky, B; Zhu, DZ; Loewen, M; van Duin, B; Mahmood, K	Nutrient processes and modeling in urban stormwater ponds and constructed wetlands	CANADIAN WATER RESOURCES JOURNAL	nutrient	Atmospheric deposition contributes to nitrogen input to SWMPs, while bound to sediments contributes to phosphorus input. The cycling of such nutrients is determined by complex physical, chemical and biological processes.
Blaszczak, JR; Steele, MK; Badgley, BD; Heffernan, JB; Hobbie, SE; Morse, JL; Rivers, EN; Hall, SJ; Neill, C; Pataki, DE; Groffman, PM; Bernhardt, ES	Sediment chemistry of urban stormwater ponds and controls on denitrification	ECOSPHERE	nutrient	No correlation between urban land cover and nutrient and contaminant concentration in SWMPs
Gold, AC; Thompson, SP; Piehler, MF	The Effects of Urbanization and Retention-Based Stormwater Management on Coastal plain Stream Nutrient Export	WATER RESOURCES RESEARCH	nutrient	SWMPs can export particulate nitrogen to nearby streams.

Song, K; Xenopoulos, MA; Marsalek, J; Frost, PC	The fingerprints of urban nutrients: dynamics of phosphorus speciation in water flowing through developed landscapes	BIOGEOCHEMISTRY	nutrient	SWMPs influence the quantity and types of phosphorus that circulate within and among urban aquatic environments.
Serrano, L; DeLorenzo, ME	Water quality and restoration in a coastal subdivision stormwater pond	JOURNAL OF ENVIRONMENTAL MANAGEMENT	nutrient	SWMPs can have euthrophic levels of phosphorous irrespective of season.
Haghighatafshar, S; Hallinger, E; Espinoza, D; Al-Rudainy, B	An innovative method for estimating settling velocity of particles in stormwater using absorbance measurements and modelling	WATER PRACTICE AND TECHNOLOGY	sediment	Sediemnt settling time in SWMPs can vary from 40-200mm/h for fast settling particles and 2-8mm/h for slow settling particles.
Marsalek, J; Marsalek, PM	Characteristics of sediments from a stormwater management pond	WATER SCIENCE AND TECHNOLOGY	sediment	SWMPs sediemnts contain potentially mobile forms of heavy metals, such as Cr, Cu and Pb.
Schroer, WF; Benitez-Nelson, CR; Smith, EM; Ziolkowski, LA	Drivers of Sediment Accumulation and Nutrient Burial in Coastal Stormwater Detention Ponds, South Carolina, USA	ECOSYSTEMS	sediment	Sediment accumulation is correlated to catchment impervious cover. The terrestrial envirnoment the main source of sedimments
Milovanovic, I; Bares, V; Hedström, A; Herrmann, I; Picek, T; Marsalek, J; Viklander, M	Enhancing stormwater sediment settling at detention pond inlets by a bottom grid structure (BGS)	WATER SCIENCE AND TECHNOLOGY	sediment	Sediment removal efficiency of SWMPs can be enhanced with alternative desings.
Schwartz, D; Sample, DJ; Grizzard, TJ	Evaluating the performance of a retrofitted stormwater wet pond for treatment of urban runoff	ENVIRONMENTAL MONITORING AND ASSESSMENT	sediment	Retrofitted SWMPs can significantly reducesuspended sediment loads.
Yang, Y; Zhu, DZ; Loewen, MR; Ahmed, SS; Zhang, WM; Yan, HB; van Duin, B; Mahmood, K	Evaluation of pollutant removal efficiency of urban stormwater wet ponds and the application of machine learning algorithms	SCIENCE OF THE TOTAL ENVIRONMENT	sediment	The efficiency of SWMPs in removing total suspended solids can chang, varying with inflow concentration, rainfall and wind.
Andradóttir, HO	Impact of Wind on Stormwater Pond Particulate Removal	JOURNAL OF ENVIRONMENTAL ENGINEERING	sediment	Wind reduces the efficiency of SWMPs in removing sediments, particularly for small particles such as clay and silt.
Greb, SR; Bannerman, RT	Influence of particle size on wet pond effectiveness	WATER ENVIRONMENT RESEARCH	sediment	SWMPs can be efficient in removing high amounts of suspended solids, mainly by trapping silt and sand sized particles.
Ahilan, S; Guan, MF; Wright, N; Sleigh, A; Allen, D; Arthur, S; Haynes, H; Krivtsov, V	Modelling the long-term suspended sedimentological effects on stormwater pond performance in an urban catchment	JOURNAL OF HYDROLOGY	sediment	SWMPs` sediment removal efficiency considerably varies thorugh time. Annual rainfall can be used to estimate annual sediment budgets.

Guan, MF; Ahilan, S; Yu, D; Peng, Y; Wright, N	Numerical modelling of hydro-morphological processes dominated by fine suspended sediment in a stormwater pond	JOURNAL OF HYDROLOGY	sediment	SWMPs can efficiently trap fine sediments, specially for flow events with smaller flow peak. Models can be used to simulate and assess the sediment retention performance of SWMPs.
Gregory, MA	Stormwater pond sediment loading and accumulation analysis	JOURNAL OF WATER MANAGEMENT MODELING	sediment	Modelling can be used to estimmate sediment load and accumulation rate in SWMPs
Wu, JS; Holman, RE; Dorney, JR	Systematic evaluation of pollutant removal by urban wet detention ponds	JOURNAL OF ENVIRONMENTAL ENGINEERING-ASCE	sediment	Surface area ratio can be an important predictor of wet pond performance. Evaluation of performance should be based on cumulative, long term data.
Ahmed, SS; Loewen, MR; Zhang, WM; Ghobrial, TR; Zhu, DZ; Mahmood, K; van Duin, B	Field observations of stratification in stormwater wet ponds	JOURNAL OF ENVIRONMENTAL MANAGEMENT	temperature	SWMPs can experience strong thermal stratification and dead zones. This can decrease pollutant retention capacity of SWMPs.
She, YT; Kemp, J; Richards, L; Loewen, M	Investigation into freezing point depression in stormwater ponds caused by road salt	COLD REGIONS SCIENCE AND TECHNOLOGY	temperature	Freezing point depression can occur in SWMPs
Stajkowski, S; Hotson, E; Zorica, M; Farghaly, H; Bonakdari, H; McBean, E; Gharabaghi, B	Modeling stormwater management pond thermal impacts during storm events	JOURNAL OF HYDROLOGY	temperature	Machine learning methods csan be used to predict thermal profiles in SWMPs
Mahmoud, SH; Ahmed, SS; Zhu, DZ; Loewen, MR; van Duin, B; Mahmood, K	Monitoring the spatial distribution of water quality of an urban stormwater pond using satellite images	ECOLOGICAL INFORMATICS	temperature	Remote sensing can expose the relationship between water temperature and Chl-a
Troitsky, B; Zhu, DZ; Loewen, M; van Duin, B; Mahmood, K	Nutrient processes and modeling in urban stormwater ponds and constructed wetlands	CANADIAN WATER RESOURCES JOURNAL	temperature	Variation in water temperature affects phosphorous dynamics in SWMPs
Song, K; Xenopoulos, MA; Buttle, JM; Marsalek, J; Wagner, ND; Pick, FR; Frost, PC	Thermal stratification patterns in urban ponds and their relationships with vertical nutrient gradients	JOURNAL OF ENVIRONMENTAL MANAGEMENT	temperature	Thermal stratification is related to nutrient stratification in SWMPs.
Semadeni-Davies, A	Winter performance of an urban stormwater pond in southern Sweden	HYDROLOGICAL PROCESSES	temperature	Strong thermal stratification of SWMPs can occur following snowmelt events