Electronic Supplementary Material (ESI) for Environmental Science: Processes & Impacts.
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Identification and assessment of ecotoxicological hazards attributable to pollutants in urban wet weather discharges

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Electronic Supplementary Information (ESI)

Table S1: Extrapolation Factor assessment criteria derivate from Orias and Perrodin[36] and TDG[37].

Available data	EF (Extrapolation Factor)
At least one short-term L(E)C50 from each of three trophic levels of the base-set (e.g. algae, daphnids and fishes)	1000
One long term chronic data (e.g. invertebrate or fish)	100
Two long term chronic data from species representing two trophic levels (e.g.algae and/or daphnids and/or fishes)	50
Two long term chronic data from species representing three trophic levels (e.g. algae, daphnids and fishes)	10
Statistics method (e.g. species sensitivity distribution (SSD)), field data or model ecosystem	5-1 (Reviewed case by case)

Table S2: Comparison of hazardous compounds list identified in UWWDs in this study with the classification of these compounds as priority pollutants or not by European Water Framework Directive and In Environmental Protection Agency.

Pollutant	Identified as hazardous		Identification as a priority subtance	
	In stormwater	In combined sewer overflows	In European Water Framework Directive (WFD, 2000/60/EC) pollutant priority list	In Environmental Protection Agency pollutant priority list
4-(para)-nonylphenol (ALK)	Yes	No	Yes	No
4-tert-pentylphenol (ALK)	Yes	No	Yes	No
4-tert-butylphenol (ALK)	Yes	No	Yes	No
Nonylphenol (ALK)	No	Yes	Yes	No
Para-tert-octylphenol (ALK)	Yes	No	Yes	No
Cadmium (M)	Yes	Yes	Yes	Yes
Chromium III (M)	Yes	No	No	Yes
Copper (M)	Yes	Yes	No	Yes
Lead (M)	Yes	Yes	Yes	Yes
Nickel (M)	Yes	No	Yes	Yes
Zinc (M)	Yes	Yes	No	Yes
Bisphenol A (O)	Yes	No	No	No
Aminotriazole (P)	Yes	Yes	No	No
Bifenthrin (P)	Yes	No	No	No
Cyfluthrin (P)	Yes	No	No	No
Cypermethrin (P)	Yes	No	Yes	No
Deltamethrin (P)	Yes	No	No	No
Desethylatrazine (P)	Yes	Yes	No	No
Diuron (P)	Yes	Yes	Yes	No
Glyphosate (P)	Yes	No	No	No
Isoproturon (P)	Yes	No	Yes	No
Lambda-cyhalothrin (P)	Yes	No	No	No
N,N-diéthyl-3-méthylbenzamide (P)	No	Yes	No	No
Permethrin (P)	Yes	No	No	No
Triclocarban (P)	No	Yes	No	No
Anthracene (PAH)	Yes	No	Yes	Yes
Benzo[a]anthracene (PAH)	Yes	No	Yes	Yes
Benzo[k]fluoranthene (PAH)	Yes	No	Yes	Yes
Benzo[g,h,i]perylene (PAH)	Yes	No	Yes	Yes
Benzo[a]pyrene (PAH)	Yes	No	Yes	Yes
Fluoranthene (PAH)	Yes	Yes	Yes	Yes
Fluorene (PAH)	Yes	No	Yes	Yes
Naphthalene (PAH)	Yes	No	Yes	Yes
Pyrene (PAH)	Yes	No	Yes	Yes
Ibuprofen (PC)	No	Yes	No	No
Triclosan (PC)	No	Yes	No	No
Trimethoprim (PC)	No	Yes	No	No
Perfluorooctanesulfonic acid (PFAA)	Yes	No	Yes	No
Perfluorononanoic acid (PFAA)	Yes	No	Yes	No
Benzyl butyl phthalate (PHT)	Yes	No	No	Yes
Diethylhexyl phthalate (PHT)	Yes	No	Yes	Yes
Diisononyl phthalate (PHT)	Yes	No	No	No
1,4-Dichlorobenzene (VOC)	Yes	No	No	Yes
Pentachlorophenol (VOC)	Yes	No	Yes	Yes