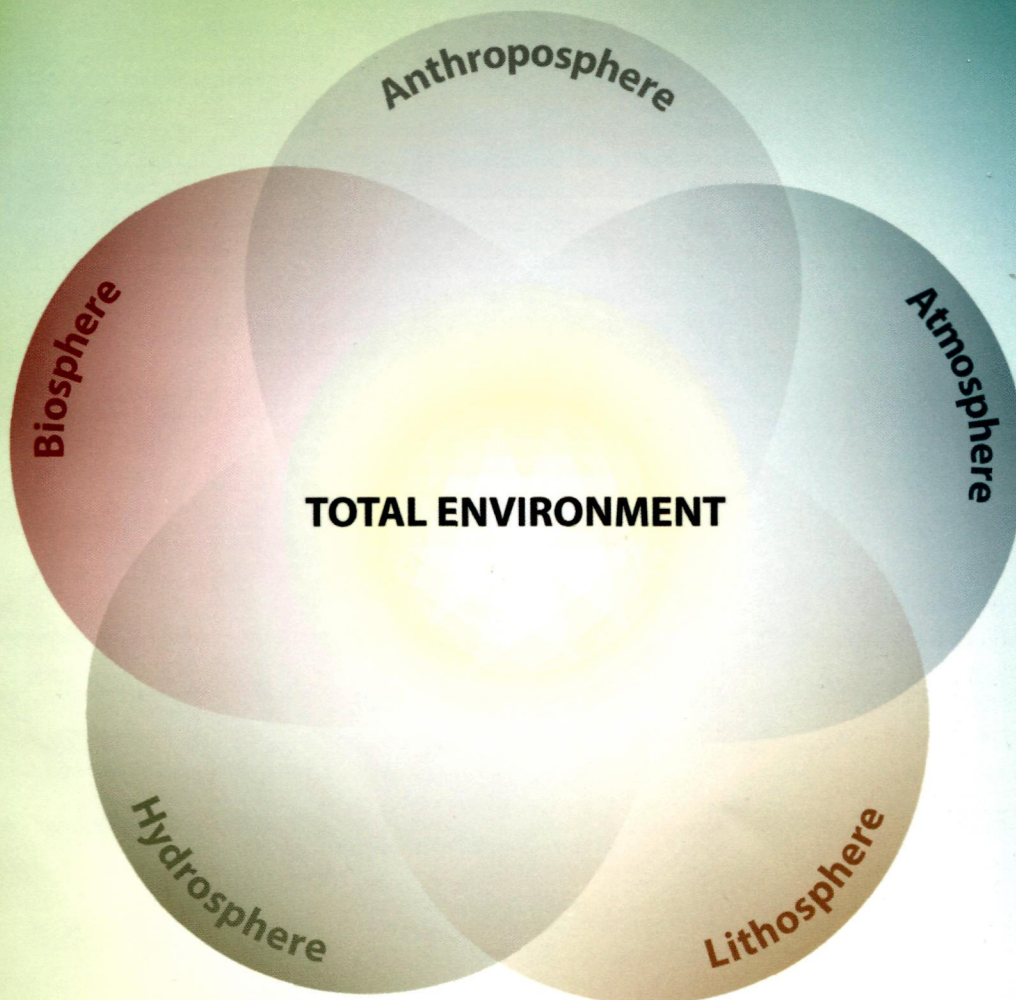
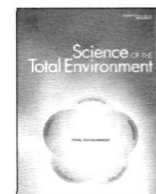


Special Sections:
Methylmercury Cycling in Wetlands Managed for Rice Agriculture and Wildlife:
Implications for Methylmercury Production, Transport, and Bioaccumulation

Foodweb Transfer, Sediment Transport, and Biological Effects of Emerging and Legacy Organic Contaminants in
the Lower Columbia River, Oregon and Washington, USA

Science OF THE Total Environment





Contents

Enzymatic functional stability of Zn-contaminated field-collected soils: An ecotoxicological perspective I. Lessard, S. Sauvé and L. Deschênes (Canada)	1
Identifying diffused nitrate sources in a stream in an agricultural field using a dual isotopic approach J. Ding, B. Xi, R. Gao, L. He, H. Liu, X. Dai and Y. Yu (China)	10
Electrical conductivity and emerging contaminant as markers of surface freshwater contamination by wastewater D.N.R. de Sousa, A.A. Mozeto, R.L. Carneiro and P.S. Fadini (Brazil)	19
Metal contamination in campus dust of Xi'an, China: A study based on multivariate statistics and spatial distribution H. Chen, X. Lu, L.Y. Li, T. Gao and Y. Chang (PR China, Canada)	27
Avoidance response of <i>Danio rerio</i> to a fungicide in a linear contamination gradient C.V.M. Araújo, C. Shinn, L.B. Mendes, D. Delello-Schneider, A.L. Sanchez and E.L.G. Espíndola (Portugal, Ecuador, Brazil)	36
Factors driving epilithic algal colonization in show caves and new insights into combating biofilm development with UV-C treatments F. Borderie, N. Tête, D. Cailhol, L. Alaoui-Sehmer, F. Bousta, D. Rieffel, L. Aleya and B. Alaoui-Sossé (France)	43
Occurrence of acidic pharmaceuticals and personal care products in Turia River Basin: From waste to drinking water E. Carmona, V. Andreu and Y. Picó (Spain)	53
An indicator to map diffuse chemical river pollution considering buffer capacity of riparian vegetation — A pan-European case study on pesticides C.J. Weissteiner, A. Pistocchi, D. Marinov, F. Bouraoui and S. Sala (Italy)	64
Organic priority substances and microbial processes in river sediments subject to contrasting hydrological conditions A. Zoppini, N. Ademollo, S. Amalfitano, P. Casella, L. Patrolecco and S. Polesello (Italy)	74
Evaluation of pesticide monitoring strategies in agricultural streams based on the toxic-unit concept — Experiences from long-term measurements M. Bundschuh, W. Goedkoop and J. Kreuger (Sweden, Germany)	84
Exposure to sediments from polluted rivers has limited phenotypic effects on larvae and adults of <i>Chironomus riparius</i> H. Arambourou, J.-N. Beisel, P. Branchu and V. Debat (France)	92
Isotopic niche metrics as indicators of toxic stress in two freshwater snails Y. Bayona, M. Roucaute, K. Cailleaud, L. Lagadic, A. Bassères and T. Caquet (France)	102
UK peatland restoration: Some economic arithmetic A. Moxey and D. Moran (UK)	114
Maternal diet, prenatal exposure to dioxin-like compounds and birth outcomes in a European prospective mother–child study (NewGeneris) E. Papadopoulou, M. Kogevinas, M. Botsivali, M. Pedersen, H. Besselink, M.A. Mendez, S. Fleming, L.J. Hardie, L.E. Knudsen, J. Wright, S. Agramunt, J. Sunyer, B. Granum, K.B. Gutzkow, G. Brunborg, J. Alexander, H.M. Meltzer, A.L. Brantsæter, K. Sarri, L. Chatzi, D.F. Merlo, J.C. Kleinjans and M. Haugen (Norway, Spain, Greece, France, The Netherlands, UK, Denmark, Italy)	121
Occurrence of <i>Cryptosporidium</i> , <i>Giardia</i> , and <i>Cyclospora</i> in influent and effluent water at wastewater treatment plants in Arizona M. Kitajima, E. Haramoto, B.C. Iker and C.P. Gerba (USA, Japan)	129
The discrimination of excess toxicity from baseline effect: Effect of bioconcentration L.M. Su, X. Liu, Y. Wang, J.J. Li, X.H. Wang, L.X. Sheng and Y.H. Zhao (PR China)	137
Endosulfan leaching from Typic Argiudolls in soybean tillage areas and groundwater pollution implications S.I. Grondona, M. Gonzalez, D.E. Martínez, H.E. Massone and K.S.B. Miglioranza (Argentina)	146
Groundwater salinity and hydrochemical processes in the volcano-sedimentary aquifer of La Aldea, Gran Canaria, Canary Islands, Spain T. Cruz-Fuentes, M.d.C. Cabrera, J. Heredia and E. Custodio (Spain)	154
Nutrient removal and microbial communities' development in a young unplanted constructed wetland using Bauxsol™ pellets to treat wastewater L.M. Despland, M.W. Clark, T. Vancov and M. Aragno (Australia, Switzerland)	167
The coating makes the difference: Acute effects of iron oxide nanoparticles on <i>Daphnia magna</i> J. Baumann, J. Köser, D. Arndt and J. Filser (Germany)	176
Reconstruction of historical atmospheric Pb using Dutch urban lake sediments: A Pb isotope study N. Walraven, B.J.H. van Os, G.Th. Klaver, J.J. Middelburg and G.R. Davies (The Netherlands, France)	185
An assessment of contaminant concentrations in toothed whale species of the NW Iberian Peninsula: Part I. Persistent organic pollutants P. Méndez-Fernandez, L. Webster, T. Chouvelon, P. Bustamante, M. Ferreira, A.F. González, A. López, C.F. Moffat, G.J. Pierce, F.L. Read, M. Russell, M.B. Santos, J. Spitz, J.V. Vingada and F. Caurant (France, Spain, Portugal, United Kingdom, Canada)	196
An assessment of contaminant concentrations in toothed whale species of the NW Iberian Peninsula: Part II. Trace element concentrations P. Méndez-Fernandez, L. Webster, T. Chouvelon, P. Bustamante, M. Ferreira, A.F. González, A. López, C.F. Moffat, G.J. Pierce, F.L. Read, M. Russell, M.B. Santos, J. Spitz, J.V. Vingada and F. Caurant (France, Spain, Portugal, UK, Canada)	206

Corrigendum to "Evaluation of dams and weirs operating for water resource management of the Geum River" [Sci Total Environ 478 (2014) 103–115]	
J.M. Ahn, S. Lee and T. Kang (Republic of Korea)	218
Special Section: Methylmercury Cycling in Wetlands Managed for Rice Agriculture and Wildlife: Implications for Methylmercury Production, Transport, and Bioaccumulation	
Methylmercury cycling in wetlands managed for rice agriculture and wildlife: Implications for methylmercury production, transport, and bioaccumulation	
L. Windham-Myers (USA)	219
Mercury cycling in agricultural and managed wetlands: A synthesis of methylmercury production, hydrologic export, and bioaccumulation from an integrated field study	
L. Windham-Myers, J.A. Fleck, J.T. Ackerman, M. Marvin-DiPasquale, C.A. Stricker, W.A. Heim, P.A.M. Bachand, C.A. Eagles-Smith, G. Gill, M. Stephenson and C.N. Alpers (USA)	221
Differentiating transpiration from evaporation in seasonal agricultural wetlands and the link to advective fluxes in the root zone	
P.A.M. Bachand, S. Bachand, J. Fleck, F. Anderson and L. Windham-Myers (USA)	232
Reprint of "Methylmercury production in and export from agricultural wetlands in California, USA: The need to account for physical transport processes into and out of the root zone"	
P.A.M. Bachand, S.M. Bachand, J.A. Fleck, C.N. Alpers, M. Stephenson and L. Windham-Myers (USA)	249
Concurrent photolytic degradation of aqueous methylmercury and dissolved organic matter	
J.A. Fleck, G. Gill, B.A. Bergamaschi, T.E.C. Kraus, B.D. Downing and C.N. Alpers (USA)	263
Mercury cycling in agricultural and managed wetlands, Yolo Bypass, California: Spatial and seasonal variations in water quality	
C.N. Alpers, J.A. Fleck, M. Marvin-DiPasquale, C.A. Stricker, M. Stephenson and H.E. Taylor (USA)	276
Methylmercury production in sediment from agricultural and non-agricultural wetlands in the Yolo Bypass, California, USA	
M. Marvin-DiPasquale, L. Windham-Myers, J.L. Agee, E. Kakouros, L.H. Kieu, J.A. Fleck, C.N. Alpers and C.A. Stricker (USA)	288
Mercury cycling in agricultural and managed wetlands of California, USA: Experimental evidence of vegetation-driven changes in sediment biogeochemistry and methylmercury production	
L. Windham-Myers, M. Marvin-DiPasquale, C.A. Stricker, J.L. Agee, L.H. Kieu and E. Kakouros (USA)	300
Mercury cycling in agricultural and managed wetlands of California, USA: Seasonal influences of vegetation on mercury methylation, storage, and transport	
L. Windham-Myers, M. Marvin-DiPasquale, E. Kakouros, J.L. Agee, L.H. Kieu, C.A. Stricker, J.A. Fleck and J.T. Ackerman (USA)	308
Special Section: Foodweb Transfer, Sediment Transport, and Biological Effects of Emerging and Legacy Organic Contaminants in the Lower Columbia River, Oregon and Washington, USA	
Foodweb transfer, sediment transport, and biological impacts of emerging and legacy organic contaminants in the lower Columbia River, Oregon and Washington, USA: USGS Contaminants and Habitat (ConHab) Project	
E. Nilsen and J. Morace (USA)	319
Spatial and temporal trends in occurrence of emerging and legacy contaminants in the Lower Columbia River 2008–2010	
D. Alvarez, S. Perkins, E. Nilsen and J. Morace (USA)	322
A survey of benthic sediment contaminants in reaches of the Columbia River Estuary based on channel sedimentation characteristics	
T.D. Counihan, I.R. Waite, E.B. Nilsen, J.M. Hardiman, E. Elias, G. Gelfenbaum and S.D. Zaugg (USA)	331
Contaminants of legacy and emerging concern in largescale suckers (<i>Catostomus macrocheilus</i>) and the foodweb in the lower Columbia River, Oregon and Washington, USA	
E. Nilsen, S. Zaugg, D. Alvarez, J. Morace, I. Waite, T. Counihan, J. Hardiman, L. Torres, R. Patiño, M. Mesa and R. Grove (USA)	344
Health status of Largescale Sucker (<i>Catostomus macrocheilus</i>) collected along an organic contaminant gradient in the lower Columbia River, Oregon and Washington, USA	
L. Torres, E. Nilsen, R. Grove and R. Patiño (USA)	353
Assessing reproductive and endocrine parameters in male largescale suckers (<i>Catostomus macrocheilus</i>) along a contaminant gradient in the lower Columbia River, USA	
J.A. Jenkins, H.M. Olivier, R.O. Draugelis-Dale, B.E. Eilts, L. Torres, R. Patiño, E. Nilsen and S.L. Goodbred (USA)	365
Correlation of gene expression and contaminant concentrations in wild largescale suckers: A field-based study	
H.E. Christiansen, A.C. Mehinto, F. Yu, R.W. Perry, N.D. Denslow, A.G. Maule and M.G. Mesa (USA)	379