

Endocrine Disruptors in Estuarine Environments: We Still Need a Simple and Cost-Effective Framework for Environmental Monitoring

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Introduction

Due to runoff, urban and industrial effluent discharges into the aquatic environment (both inland and coastal), emergent pollutants like pharmaceuticals, pesticides and corresponding by-products, natural and artificial hormones and several industrial chemicals (e.g. alkylphenols, phthalates, bisphenol A, polychlorinated biphenyls) are starting to be detected at environmental concerning concentrations in several ecosystems [1,2]. River estuaries, in particular, are known for their high productivity, ecological value and for the functions they perform (e.g. food production) [3]. Thereby, the estuarine pollution is one of the most worrying [4], being highly affected by direct discharges and activities as well as by upstream contamination.

around the world, accordingly some recent published studies and, with a brief calculation of hazardous quotients (HQ) using available PNECs it is possible to perceive that, considering each EDC individually high risks are expected for aquatic biota in almost all the systems monitored, since HQ highly greater than 1 were recorded.

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