Source apportionment of nutrient loads in 17 European catchments



In this poster a source apportionment of nitrogen export from 17 European catchments involved in the EUROHARP project is presented. The calculated nitrogen loss per hectare agricultural land varies greatly between European countries (see Figures and Table). One main reason for this is the variation in application of nitrogen in fertiliser and animal manure in agriculture (eg. eastern Europe and western Europe). Another major factor is the removal of nitrate nitrogen in groundwater being of great importance in some countries (eg. Denmark) but of low importance in other countries (eg. Norway and Sweden). Nitrogen removal in groundwater is not included in the retention estimates (se opposite poster) and hence the source apportionment.

Source apportionment

Measured export of nitrogen from 17 European catchments and calculated nitrogen loss per hectar agricultural land to surface waters applying the source apportionment tool in EUROHARP (www.euroharp.org).

	Catchment size (km²)	Measured Nitrogen export from the catchment (kg N ha ⁻¹)	from agricultural land to surface waters
Core catchments		(kg N lia)	(kg N ha ⁻¹)
Vansjø-Hobøl, Norway	690	6.2	88
Yourkshire Ouse, England	3315	20.5	36
Enza, Italy	901	7.7	13
 Non-core catchments 			
Eurajoki, Finland	1336	5.1	49
Rönne Å, Sweden	1900	5.9	64
Odense Å, Denmark	486	23.0	38
Vechte, The Netherlands/German	y 2400	36.5	48
Uecker, Germany	2430	3.2	22
Susve, Lithuania	1165	8.7	13
Lough Derg and Ree, Ireland	10600	6.1	27
Attert, Luxembourg	254	25.7	43
Gurk, Austria	2574	7.6	33
Zelivka, Czech Republic	1189	11.8	28
Kapos, Hungary	3170	2.9	10
Vilaine, France	10134	16.2	37
Guadiamar, Spain	1356	2.8	Not possible

