

2014 Freshwater Eionet Workshop

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Review of SoE data

- Update of SoE reporting sheets for emissions following the WFD reporting guidance

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Comparative analysis highlights shortcomings

Fig. 2.2 Reported SoE point source emissions at RBD level

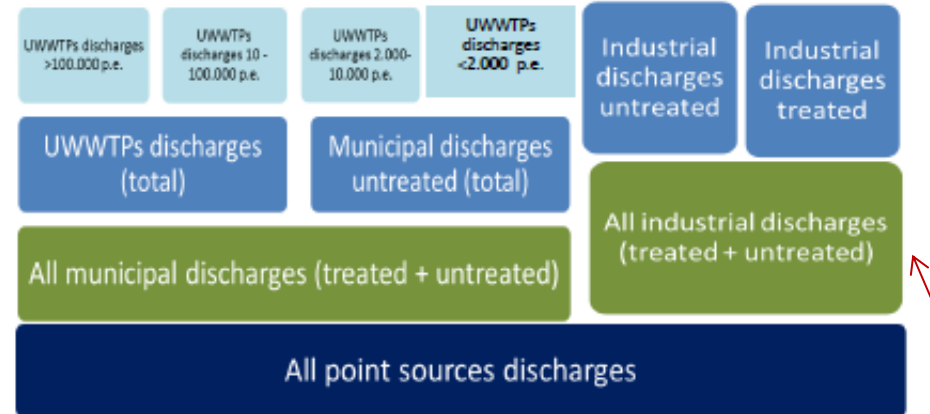


Fig. 2.3 Reported OECD/Eurostat point source emissions at country or regional level



Fig. 2.4 Reported WFD point source emissions at RBD level



EEA/NSV/10/002 – ETC/ICM

European Topic Centre
Inland, coastal, marine waters

Emissions of chemicals to Europe's waters

Analysis of data reported under European data flows

ETC/ICM Technical Report x/2014

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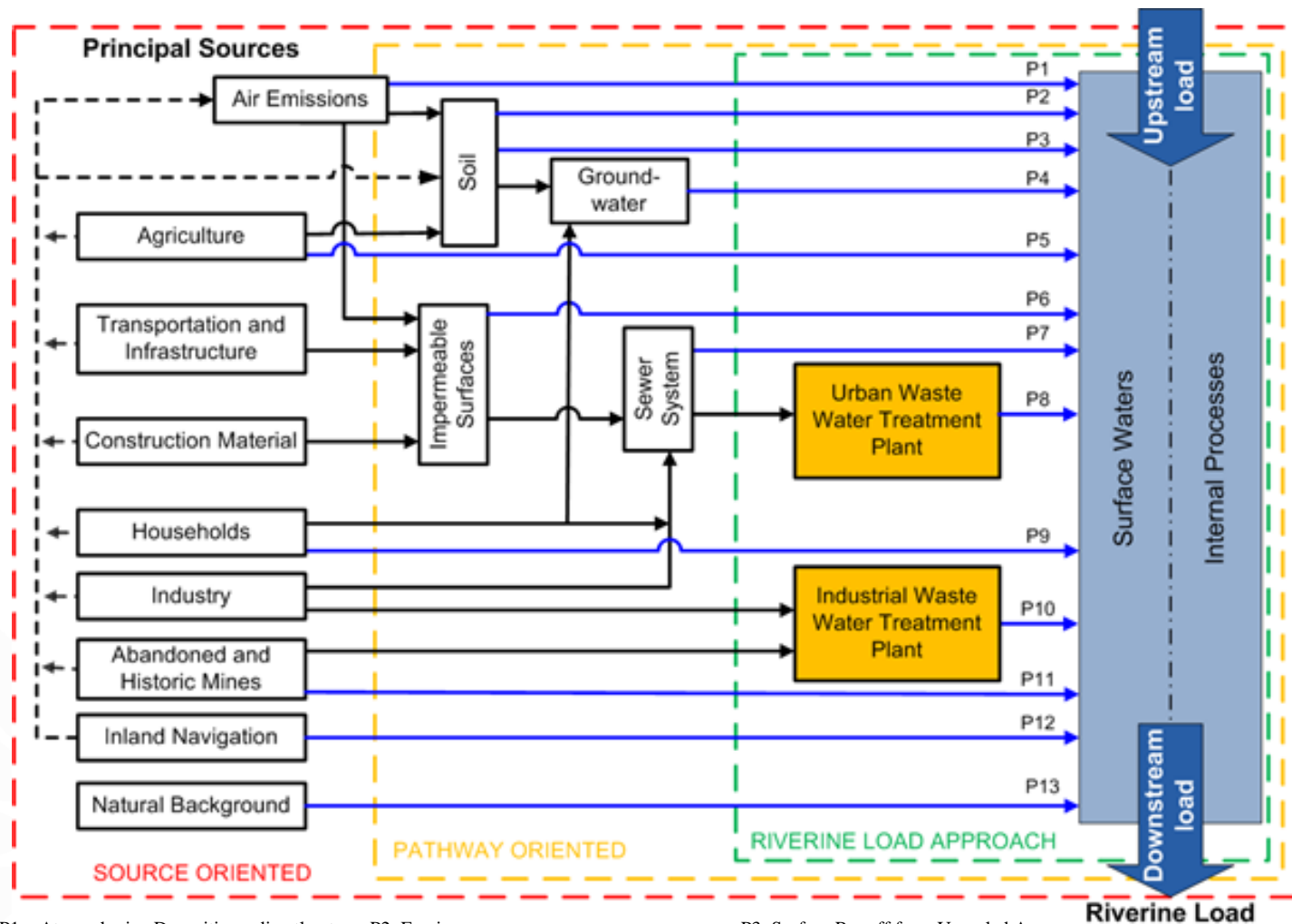
EEA project manager: Bo Jacobsen

Better source apportionment in SoE than in WFD

From WFD guidance / CIS emission inventory guidance

- WFD guidance enables reporting of emissions with source apportionment (InputCategory) based on:
 - CIS inventory guidance (no. 28) or
 - WFD list of pressures or
 - SoE emissions
- Emissions data are required on RBD or sub-unit level for all priority and hazardous substances, but with different level of detail. Substances should be identified as relevant in line with the following criteria (at least one of them has to be met):
 - The substance causes a failure of good chemical status in at least one water body;
 - The level of concentration for a substance is above half of the EQS in more than one water Body;
 - Monitoring results show an increasing trend of concentration which may cause problems within the next RBMP cycles;
 - PRTR data show releases which might lead to concentrations matching the criteria above;
 - Known sources and activities causing inputs in the RBD exist which might lead to concentrations matching the criteria above.





P1: Atmospheric Deposition directly to Surface Waters

P2: Erosion

P3: Surface Runoff from Unsealed Areas

P4 Interflow, Tile Drainage and Groundwater¹

P5: Direct Discharges and Drifting

P6: Surface Runoff from Sealed Areas

P7: Storm Water Outlets, Combined Sewer Overflows and Unconnected Sewers

P8: Urban Waste Water Treated

P9: Individual - Treated and Untreated-Household Discharges

P10 Industrial Waste Water treated

P11: Direct Discharges from Mining Areas²

P12: Direct Discharges from Navigation³

P13 Natural Background

The encoding a) - m) has been inserted in the figure to enable identification of source categories in relation to their pathways P1-P13.

Event/date:
Author:



Proposed changes in SoE Emissions (1)

(no change in data dictionary)

Focus on better (but not full) harmonisation between WFD reporting guidance and SoE Emissions reporting with the possibility to provide the necessary information for assessments by the EEA.

- Terminology:
 - SoE emission load = WFD emission “input”
- Pollutants:
 - SoE list of “preferred” substances (not only EQS substances) will be updated according new EQS directive and frequently monitored chemical substances



Comparison WFD list of pressures vs. SoE emissions

WFD list of pressures		size class	SoE Emissions		sub-type	size class		
Source coding and category			Source coding and category					
1.1	Point – Urban waste water		U	Urban wastewater discharges total	U1-untreated	U11 U12 U13 U14	Direct discharges to coastal and transitional, total	Riverine input to coastal water
1.2	Point - Storm Overflows				U2-treated	U21 U22 U23 U24		
(Industrial discharges total (1.3 + 1.4))		1.3 1.4	I	Industrial wastewater discharges	I4-untreated I3 - treated			
1.5	Point - Contaminated Sites / Abandoned industrial sites		O	Other waste water discharges total				
1.6	Point - Waste disposal sites							
1.7	Point - Mine waters							
1.8	Point - Aquaculture							
1.9	Point – Other							
(Total point sources) - sum of above				(total point sources) - PT + DO				
2.1	Diffuse - Urban run off		NP5	Storm overflow emissions				
2.2	Diffuse – Agricultural		NP1	Agricultural emissions				
2.6	Diffuse - Discharges not connected to sewerage network		NP3	Un-connected dwellings emissions				
2.7	Diffuse - Atmospheric deposition		NP2	Atmospheric deposition				
2.3	Diffuse – Forestry		NP7	Other diffuse emissions				
2.4	Diffuse – Transport							
2.5	Diffuse – Contaminated sites/Abandoned industrial sites							
2.8	Diffuse – Mining							
2.9	Diffuse – Aquaculture							
2.1	Diffuse – Other							
(Total diffuse sources) - sum of above			NP	Total diffuse emissions to inland waters				
(Total – point and diffuse sources)			(Total – point and diffuse sources)					
		1.3 in E-PRTR 1.4 Not in E-PRTR						
			U11 < 2.000 p.e. U12 - 2.000 - 10.000 p.e. U13 - 10.000 - 100.000 p.e. U14 - > 100.000 p.e.					

Proposed changes in SoE Emissions reporting (2)

(change in data dictionary)

- Emission categories
 - Keep source oriented approach but better alignment with WFD list of pressures
 - Split of "direct discharges to TC waters" (D0) into individual source categories
 - "other" wastewater discharges and diffuse emissions should be better aligned with the WFD pressure list.
 - some detailed categories from WFD pressures (e.g. Waste disposal sites 1.6 and Contaminated Sites 1.5) could be merged for SoE emissions
 - possibility to report riverine load for inland monitoring stations
 - either as new parameter in SoE emissions or as currently enabled in SoE river water quality reporting
 - Already proposed at 2013 Freshwater Eionet Workshop
 - Consider to include "Methodology" and "InputDataQuality" from WFD schema elements ?