



Water Accounting

Emission Accounts

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What do water emission accounts measure?

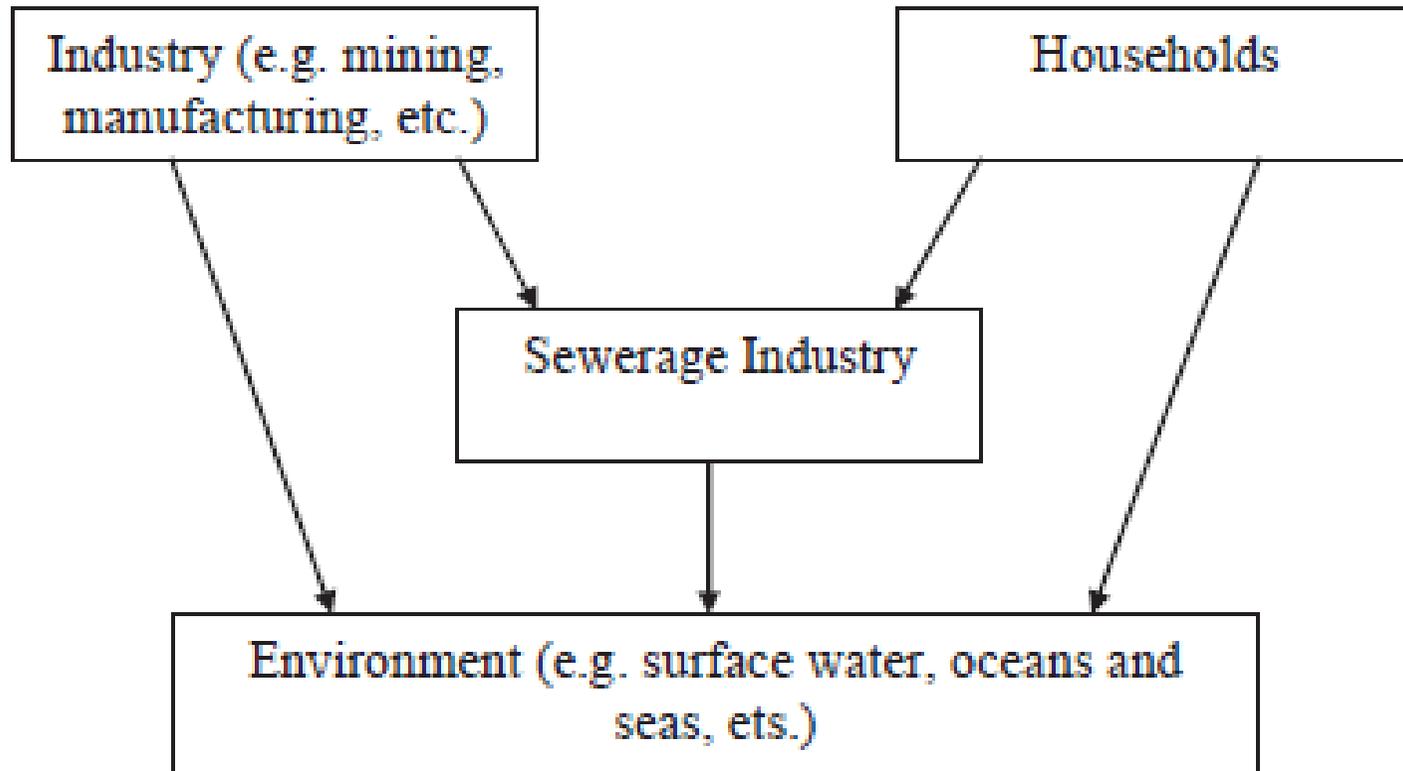
- Quantity of substances added to water by establishments and households during an accounting period.
- Quantities expressed in terms of mass (kilograms or tonnes)
- Water emission accounts cover:
 - a) Substances added to wastewater and collected in the sewerage system
 - b) Substances added to wastewater discharged directly to water bodies
 - c) Substances from non-point sources, for example, emissions and releases from urban runoff and emissions from agriculture





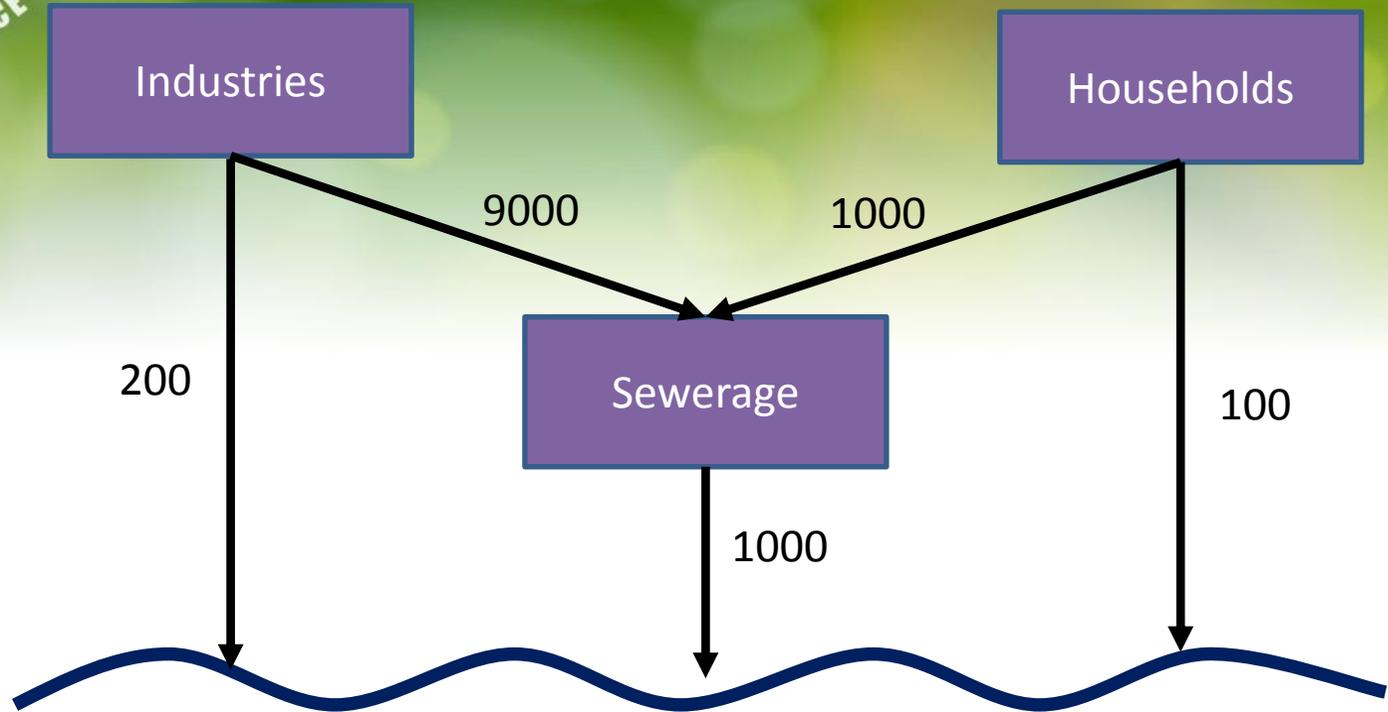
Water Emissions Account

Emissions to water are substances released to water resources by establishments and households as a result of production, consumption and accumulation processes.





Emission Accounts: simplified example (e.g. Nitrogen)



Indicator examples:

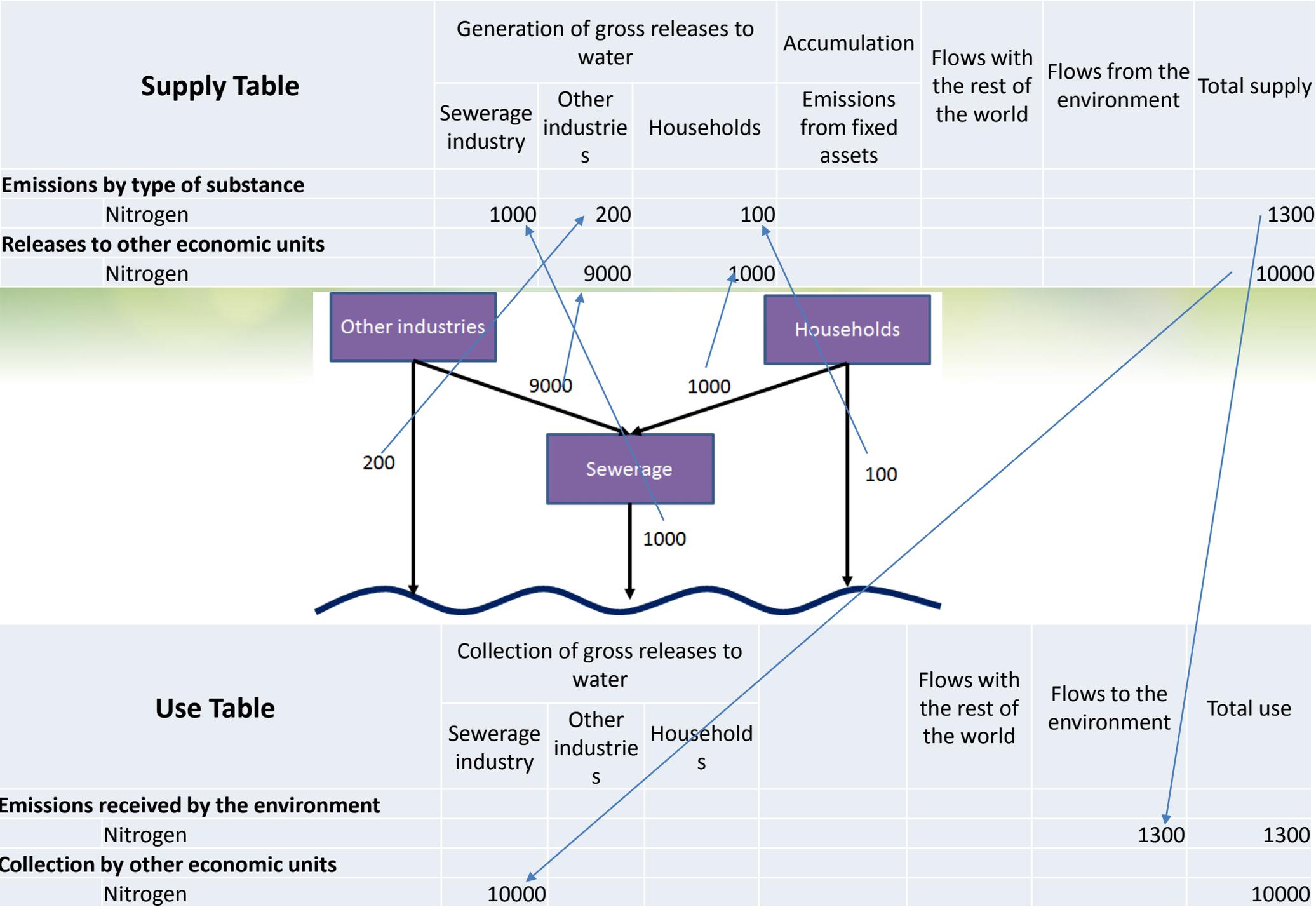
Treatment efficiency of sewerage industry: 90%

Net emissions households: $100 + 1000 \times (1 - \text{treatment efficiency}) = 200$

Net emissions industries: $200 + 9000 \times (1 - \text{treatment efficiency}) = 1100$

Total emissions: $100 + 1000 + 200 = 1300$





Water Emissions: Supply Table

Physical supply table for gross releases of substances to water

	Generation of gross releases to water			Accumulation	Flows with the rest of the world	Flows from the environment	Total supply
	Sewerage industry	Other industries	Households	Emissions from fixed assets			
Emissions by type of substance							
BOD/COD ^a	5 594	11 998	2 712				20 304
Suspended solids							
Heavy metals							
Phosphorus	836	1 587	533				2 956
Nitrogen	10 033	47 258	1 908				59 199
Releases to other economic units							
BOD/COD ^a		7 927	8 950				16 877
Suspended solids							
Heavy metals							
Phosphorus		814	6 786				7 600
Nitrogen		15 139	30 463				45 602

Water Emissions: Use Table

Physical use table for gross releases of substances to water

	Generation of gross releases to water			Flows with the rest of the world	Flows to the environment	Total Use
	Sewerage industry	Other industries	Households			
Emissions received by the environment						
BOD/COD ^a					20 304	20 304
Suspended solids						
Heavy metals						
Phosphorus					2 956	2 956
Nitrogen					59 199	59 199
Collection by other economic units						
BOD/COD ^a	16 877					16 877
Suspended solids						
Heavy metals						
Phosphorus	7 600					7 600
Nitrogen	45 602					45 602



Thank you for your attention!

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