BSAP and Eutrophication

An preliminary update of the nutrient reduction allocation scheme

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NO REVISION NOW

- 1. Environmental targets
- 2. Allowable nutrient inputs
- 3. Reductions imposed by improved waste water treatment



WHAT TO REVISE

- 1. Consider atmospheric loads allocated to countries (not only from drainage basins)
- 2. Use loads averaged for 2000-2006 (instead of 1997-03)



ATMOSPHERIC DEPOSITION

- EMEP calculations now available for each year 1997-2006
- Averaged for 1997-2003 and 2000-2006
- For each sub basin and related to sources
 - HELCOM countries
 - Shipping
 - Other (non HELCOM) countries
 - Combustion
 - Agriculture
 - Transport

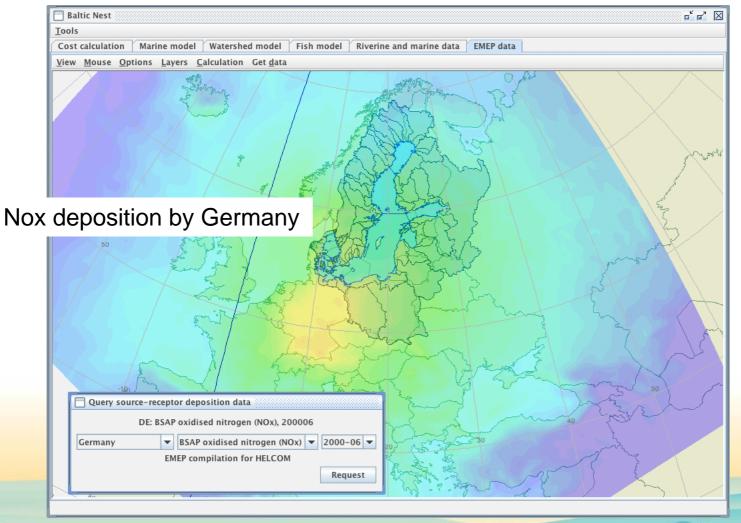


ALLOWABLE NUTRIENT INPUTS INCLUDING ATMOSPHERIC LOADS

BASIN	Nitrogen	Phosphorus
Bothnian Bay	60,256	2,585
Bothnian Sea	83,983	2,457
Baltic Proper	362,306	6,746
Gulf of Finland	119,508	4,860
Gulf of Riga	88,419	1,430
Danish Straits	54,604	1,409
Kattegat	64,621	1,573
sum	833,696	21,059

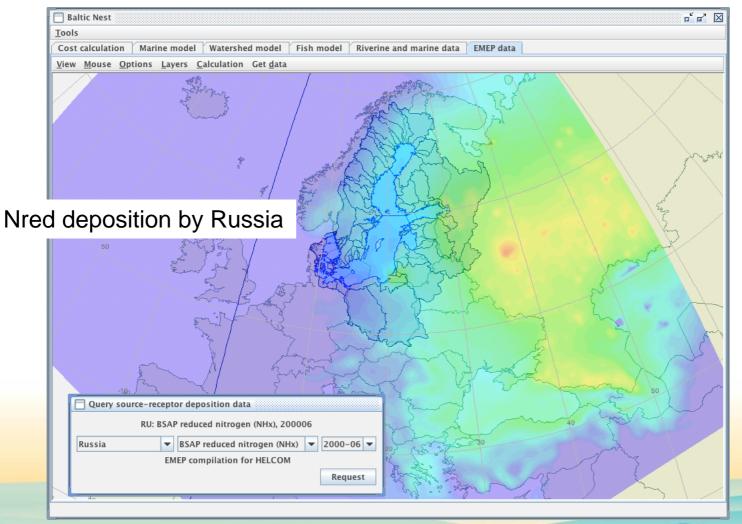


EMEP DATA INTERFACED TO BNI/NEST



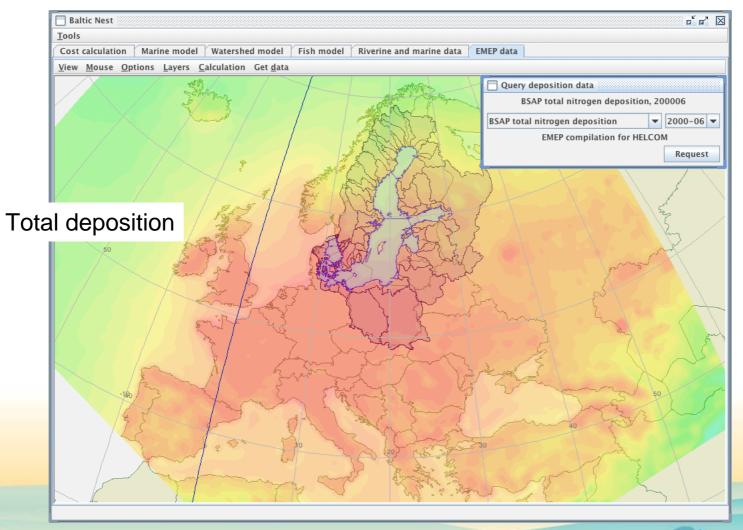


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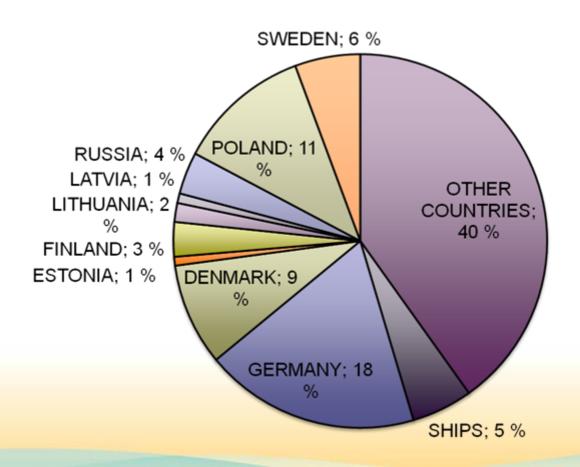


EMEP DATA INTERFACED TO BNI/NEST





AVERAGED TOTAL N LOADS, 2000-2006, ON THE ENTIRE BALTIC SEA





DIFFERENCES BETWEEN ALLOWABLE ATMOSPHERIC INPUTS AND LOADS 00-06

A decrease of 13,532 tons!



DIFFERENCES BETWEEN LOADS FROM DRAINAGE BASINS (97-03 VS. 00-06

BASIN	Nitrogen	Phosphorous
Bothnian Bay	1,120	-210
Bothnian Sea	-517	-200
Baltic Proper	-58,860	-4,781
Gulf of Finland	4,975	156
Gulf of Riga	-7,820	193
Danish Straits	-6,209	-148
Kattegat	-3,970	-49
SUM	-71,279	-5,039



NUTRIENT LOAD DATA FOR RUSSIA IN PLC5 NOT VERIFIED YET!



DIFFERENCES BETWEEN LOADS FROM DRAINAGE BASINS 97-03 VS. 00-06 DISREGARING CHANGES IN LOADS FROM RUSSIA(GF)

BASIN	Nitrogen	Phosphorous
Bothnian Bay	1,120	-210
Bothnian Sea	-517	-200
Baltic Proper	-54,356	-3,760
Gulf of Finland	4,975	156
Gulf of Riga	-7,820	193
Danish Straits	-6,209	-148
Kattegat	-3,970	-49
SUM	-66,775	-4,019



CONCLUSIONS

- •Roughly half of the N reductions and a third of the P reductions for BSAP have already been achieved!
- •Country allocations cannot be calculated until PLC5 is available!





