



## Need to reduce nutrient load in the Baltic Sea

BFFE Conference

Helsinki 25 February 2015

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### Helsinki Commission (HELCOM)

- Intergovernmental organisation
- 9 coastal countries & EU
- Marine area:
  - 415,000 km<sup>2</sup>
- Catchment area:
  - 1.72 million km<sup>2</sup>  
(4 x size of the sea area)
  - 14 countries
  - 85 million people



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# Life gets better after 40

The HELCOM logo is a circular emblem with a yellow border. Inside the circle, the word "HELCOM" is written in blue capital letters along the top inner edge. The center of the circle features a blue silhouette map of the Baltic Sea region, surrounded by a ring of small blue dots.

## 40 years of:

- Incredible geo-political changes
- Complete ignorance of the sea's ecological sensitivity has gradually changed to a great public concern for the health of the Baltic Sea
- research and documentation of the sea
- scientific warnings – is anybody listening?
- unwillingness to pay for environmental measures
- proposed measures in international cooperation watered down when confronted with political and economic realities

The regional cooperation has many success-stories .....



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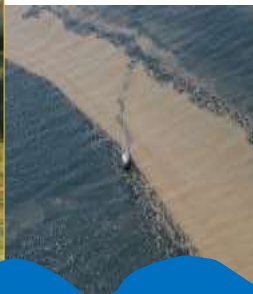


... but the eutrophication remains

From space



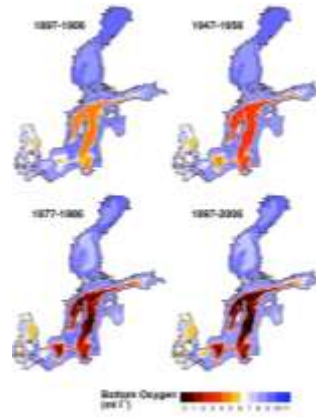
From our boat



At our beach



## Critical situation in the Baltic: algae blooms and dead bottoms

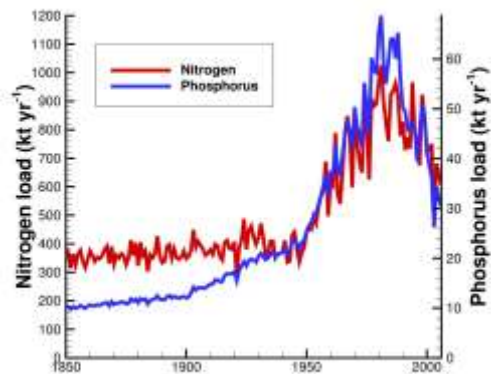


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## Too much nutrients to the sea!

- Population increase, urbanization and sanitation...
- Intensification of agriculture, application of fertilizers...
- Increased traffic, combustion, industrial activities...



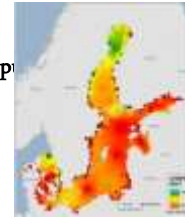
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## BSAP Nutrient Reduction Targets

### MAI

Maximum allowable inputs: the basin-wise maximal nitrogen and phosphorus input that will result in a development towards reaching the ecological targets



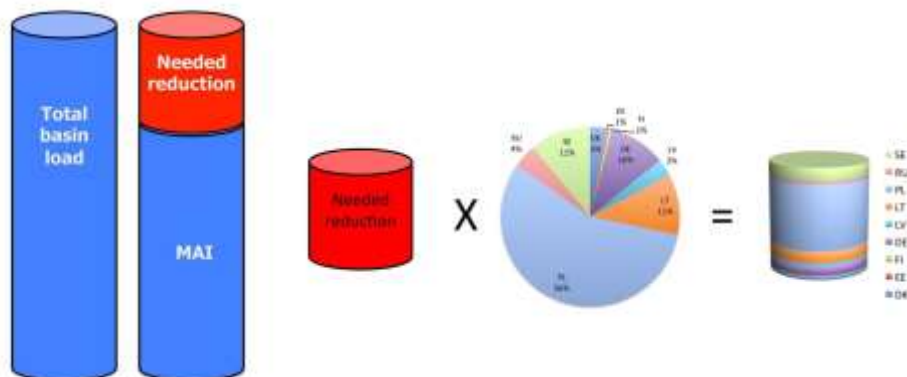
### CART

Country-wise allocation of reduction targets: the necessary nutrient input reduction distributed per Country according to agreed principles

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## Calculation of Maximum Allowable Input (MAI) and Country Allocated Reduction Target (CART)

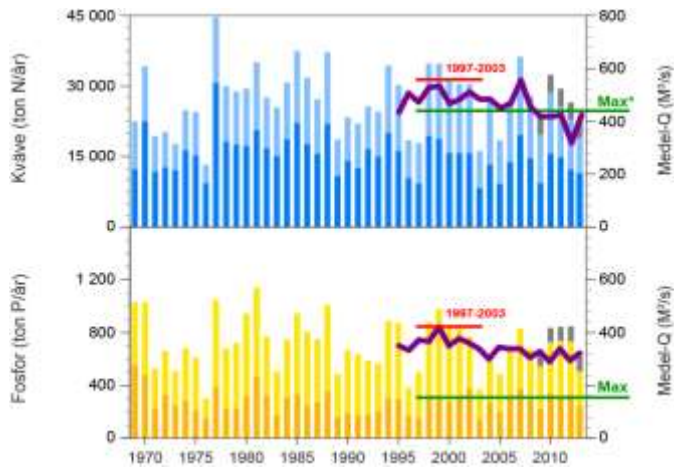


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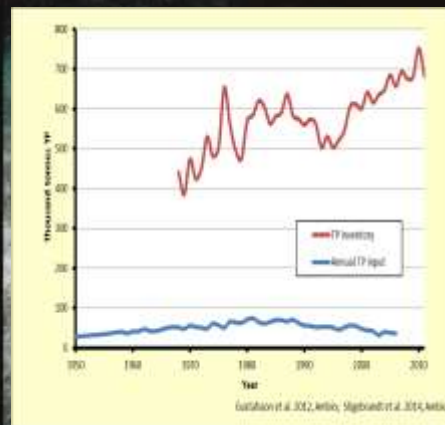
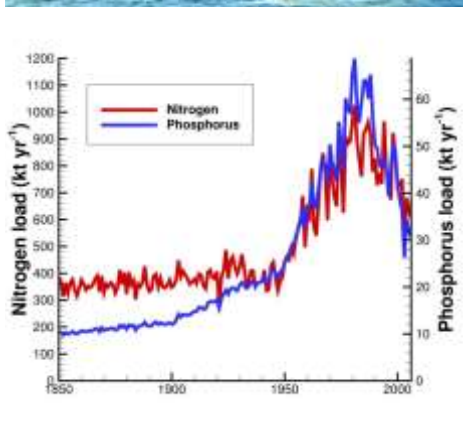
## Sweden: Progress towards BSAP targets: Baltic Proper



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## IS THE BALTIC SEA GETTING BETTER?



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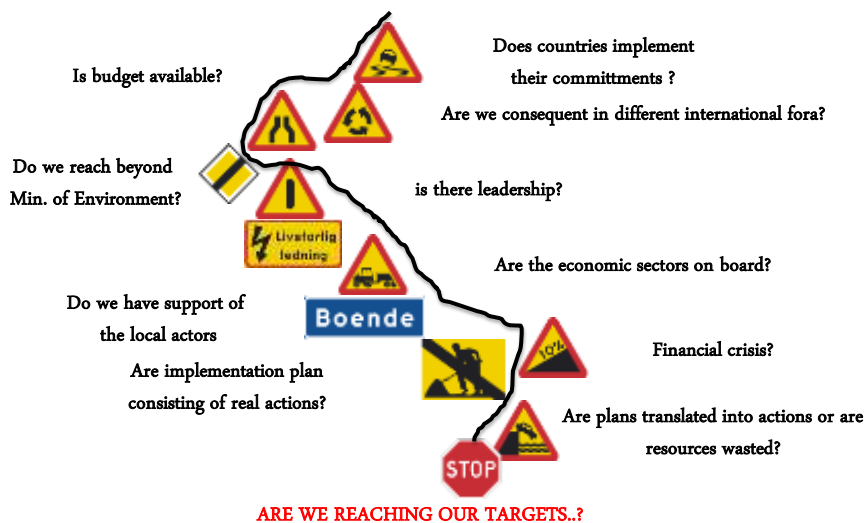





## EXAMPLES OF SEA BASED MEASURES

- OXYGENIZATION
- CHEMICAL PRECIPITATION
- DREDGING
- MUSSEL AND ALGAE FARMING
- COLLECTING STRANDED SEAWEED
- MANIPULATING FISH STOCKS
- USING NUTRIENT RICH WATER FOR IRRIGATION

## The "roadmap" towards a clean Baltic Sea







Our actions must be more than a step in the right direction and a footprint in the sand!

Thanks for your attention!  
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