

Improving the Baltic Sea Management

Brainstorming Results

by

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Preamble

- The Baltic Sea ecosystem is undergoing significant climate and human induced changes
- The unpredictability of the recent climate induced ecosystem changes emphasizes the imperativeness of the precautionary principle

BSAP Segments

- Eutrophication
- Hazardous Substances
- Maritime Activities
- Biodiversity

Eutrophication

AMBER Results

- Impact of organic nitrogen is strongly underestimated
- Nitrogen related processes in the water column should be included in the nutrient cycle models
- Coastal hypoxia reduces the natural nutrient removal capacity

Eutrophication

AMBER Results

- ground water:
 - Puck Bay:
 - phosphate loads via ground water are comparable with atmospheric deposition and riverine discharge
 - ammonium load is lower than atmospheric deposition but still significant
 - extrapolating the results from the Puck Bay might not be suitable

Eutrophication

Suggestions

- review farming habits – e.g. reducing the amount of manure put on the fields, timing of fertilizing
- subsidise fuel effective ships and exhaust filters to reduce atmospheric deposition
- ground water reaching the sea should be protected and monitored
- use of catchment models to identify hot spots to make effective measure management plans

Eutrophication

Suggestions

- ground water monitoring stations along the coasts are necessary
- reduce EU subsidising for meat industry
- support for precision farming
- support of small farms
- recycling of N and P that is in the system by enhancing waste water treatment,
- restrict import of N and P into the Baltic Sea catchment

Hazardous Substances

AMBER Results

- Ground water may contain hazardous substances (BPA, hormones, antibiotics etc.)

Suggestions

- monitoring of hazardous substances in ground water necessary

Biodiversity

AMBER Results

- climate change will impose further stress on ecosystem
- higher runoff will cause lower salinity which causes shifts in ecosystem community

Suggestions

- reduce further stress through human impact by further reducing nutrients