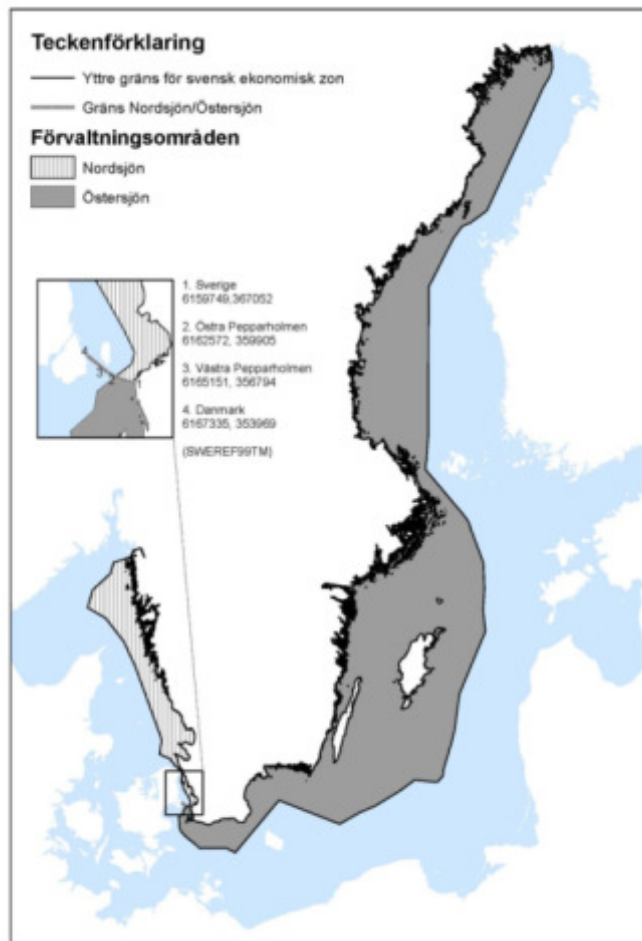


Stakeholder workshop on MSFD implementation

Main messages, targets and indicators for the Good Environmental Status from initial assessments – Swedish approach

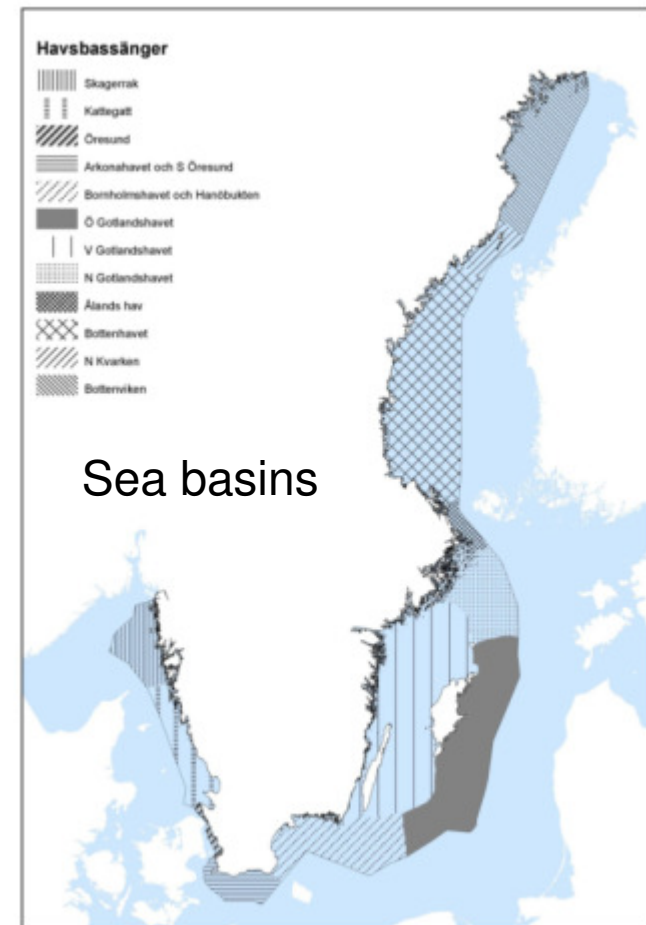
Bertil Håkansson
bertil.hakansson@havochvatten.se

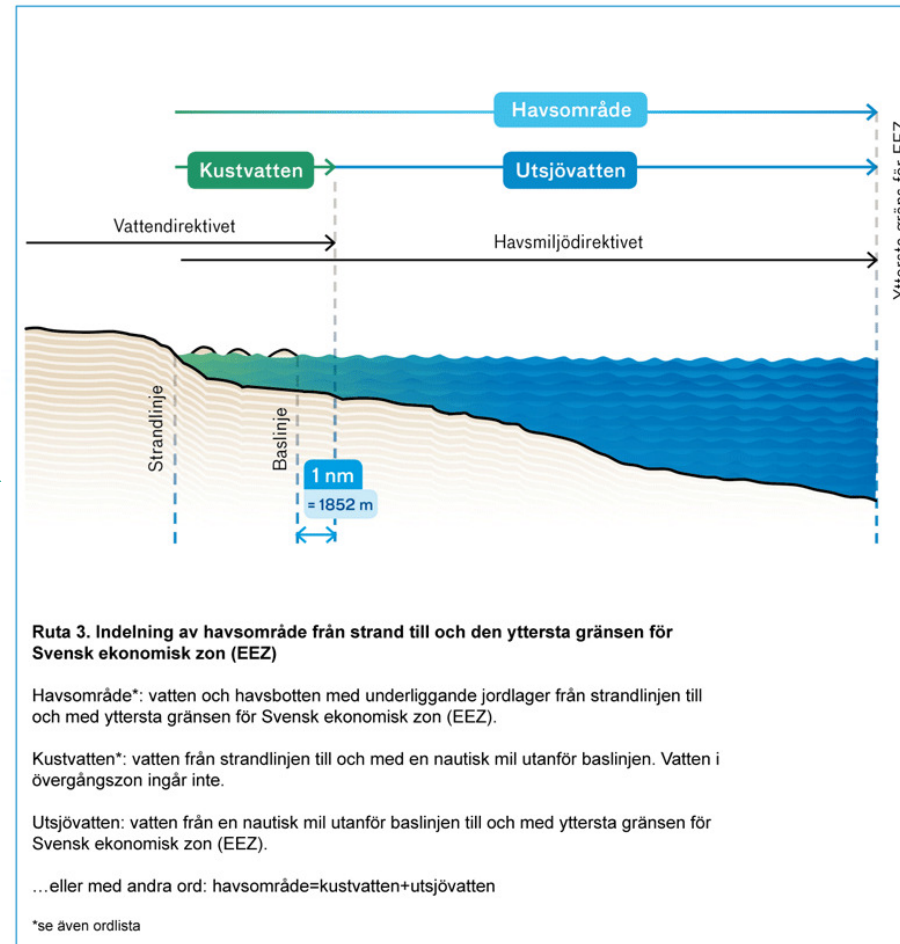
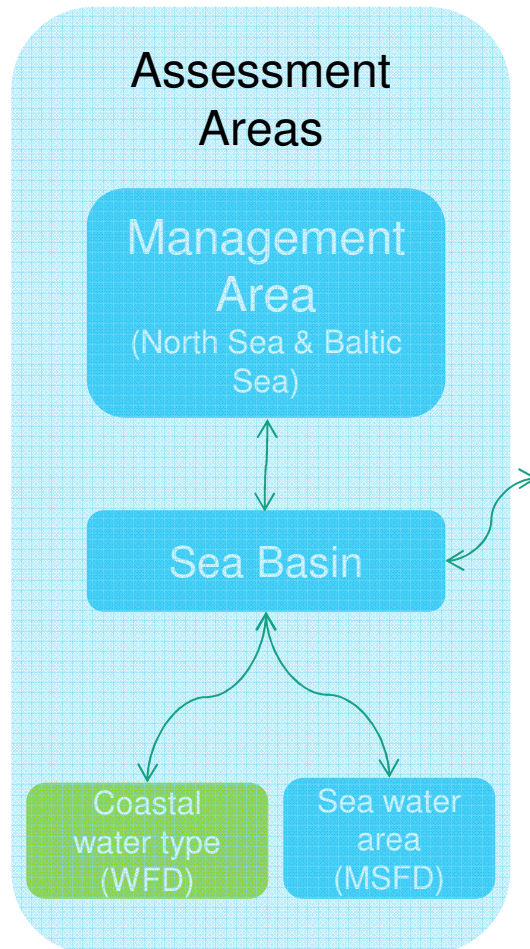
Swedish Agency
for Marine and
Water Management



Management areas:

1. North Sea subregion
2. Baltic Sea region





Initial Assessment

Status of environment Appendix III, Table I

- Physical & chemical conditions
- Habitats
- Biological conditions
- Other conditions

Socio-economics

- Cost-analysis
- Social attitudes

Pressures and Impacts Appendix III, Table II

- Physical loss & disturbance
- Other physical disturbance
- Interference with hydrographic processes
- Contaminants
- Discharges
- Load of nutrients
- Biological disturbances

The main conclusions/most interesting findings from Initial Assessments

The initial assessment represent a holistic approach taking into account:

- Status of the marine environment
- Most important pressures and impacts
- Cost analysis for the degradation of ecosystem services (only maritime so far)
- Social analysis on attitudes of marine environment

Identified problems concerning the status of marine area

Lack of knowledge, data & scale adaption and integrated assessment procedures!

Partly:

Deskriptor 1 on biodiversity (habitats and species)

Deskriptor 6 on seafloor integrity

Deskriptor 7 on hydrographic conditions

All: Deskriptor 4 on food webs, deskriptor 10 on litter and deskriptor 11 on noise.

Biggest impacts

Input of nutrients and organic material (phosphorus and nitrogen)

Input of contaminants

Biological disturbance (Non-indigenous species, GMO, or organisms threatening the ecosystem, outake of species)

Physical disturbance (Sea-floor integrity, biogenic substrates, hydrographic conditions)

Information gaps

Gap analysis is made in all parts of the initial assessment relevant to art. 8, 9 & 10.

29 complete Indicators

25 incomplete Indicators, operational 2014

14 incomplete Indicators, operational 2018

Criteria 10.2, 11.1 and 11.3 no indicator at all so far

2. GES and targets (MSFD articles 9 and 10)

Targets == Environmental Quality Standards (EQS) in SE

Descriptor 1: Biological diversity (criteria 1.1 – 1.7)

Descriptor 2: Non-indigenous species (criteria 2.1, 2.2)

Descriptor 3: Population of commercial fish / shell fish (3.1-3.3)

Descriptor 4: Elements of marine food webs (4.1 – 4.3)

Descriptor 5: Eutrophication (5.1 – 5.3)

Descriptor 8: Contaminants (8.1 – 8.2) *GES at Indicator level*

Plus for descriptors 6, 7, 9, 10 ,11

First case in a local court of environment

- Wind mill park at Hanö Bight under legal review, taking into account national EQS according to MSFD.



2. GES and targets (EQS) (MSFD articles 9 and 10) – cont. What is the gap between the current state by descriptor and GES?

- D1 Biodiversity: 7 GES but only 4 have indicators
- D2 Non-indigenous species: 2 GES but no indicators
- D3 Fish and shellfish: 3 GES but only 2 indicators
- D4 Marine food webs: 3 GES but only 2 indicators
- D5 Eutrophication: 3GES and 10 indicators
- D6 Sea bottom integrity: 2 GES and 2 indicators
- D7 Hydrographic conditions: 2 GES and no indicator
- D8 Contaminants: 2 GES and 3 indicators
- D9 Contaminants in fish and sea food: 1 GES and 1 indicator
- D10 Marine litter: 2 GES and 1 indicator
- D11 Noise: 2 GES and no indicator

2. GES and targets (MSFD articles 9 and 10) – cont.

Reaching the target – what are consequences for sectors impacting the sea?

Most likely impacts on fishing and agricultural industry! But how big is not possible to say today. Maritime sector is another important sector (IMO's Ballast water directive).

Where measures would be needed to achieve GES/targets?

Is to be solved during the years to come! But in general the measures will not be effective if no coherence is achieved within the marine region!

3) Socio-economic analyses of marine waters

What are costs related to degradation of the marine environment?

Maritime sector in SE annual turn over is ca 330 000 milj SEK
which is about 5 % of the total turn over.

Ecosystem services like biodiversity, eutrophication and estetic
values are below GES and will continue to decrease under
business as usual case.