

Economic aspects of the European Marine Strategy Framework Directive (MSFD)

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**Wetlands for Clear Water
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Wetlands in the context of WFD and MSFD

- ⇒ **Wetlands play an important role in reaching WFD objectives**
- ⇒ **Ecosystem Services of Wetlands improve the water situation for**
 - **both ground and surface water**
 - **in a both quantitative and qualitative way.**
- ⇒ **BUT: some wetland-related Ecosystem Services play a potentially important role for reaching some of the MSFD objectives as well**

Wetlands in the context of WFD and MSFD

- ⇒ **With regard to the qualitative descriptors determining “good ecological status” (MSFD, Annex I):**
- (5):** *“Human-induced eutrophication is minimised, especially adverse effects thereof, such as losses in biodiversity, ecosystem degradation, harmful algae blooms and oxygen deficiency in bottom waters”*
- (8):** *“Concentrations of contaminants are at levels not giving rise to pollution effects”*
- ⇒ **Sources for nutrients and/or contaminants in marine waters are mostly land-based**
- ⇒ **Some form of land-based “matter retention” necessary**
- ⇒ **Dehydrated, drained wetlands: from sources to sinks?**

Economic Elements of the MSFD

- ⇒ **The MSFD and the WFD follow a similar integrative approach**
- ⇒ **The experiences made in the first 10 years of implementing the WFD can be utilized for MSFD-implementation - including the use of economics**
- ⇒ **General assumption of WFD and MSFD: environmental protection and economic principles do not exclude each other**
- ⇒ **Instead, economic elements can play an important role in reaching the environmental objectives of both directives**
- ⇒ **“good environmental status” (GES) by 2020**

Economic Elements of the MSFD

⇒ The economic elements include:

- 2012: Initial Assessment: Economic and social analysis (ESA), including an analysis of the „costs of degradation“ (Art. 8)

- 2012: Establishment of environmental targets, considering economic and social concerns (Art. 10 and Annex IV)

- 2015: Requirement for cost-effective measures, and for carrying out impact assessments including cost-benefit analysis (CBA) prior to the introduction of any new measures (Art. 13 and Annex VI)

- 2015: Exceptions for reasons of overriding public interest or where costs are disproportionate. (Art. 14)

Economic Elements of the MSFD - CBA

- ⇒ **CBA: financial appraisal tool; may include monetized environmental benefits of measures/projects**
- ⇒ **Theoretical concepts for CBA exist in abundance**
- ⇒ **PROBLEM: lack of quantifiable data & of an operational concept that is applicable in practice by the administrations**
- ⇒ **Therefore: need to combine quantitative and qualitative information**
- ⇒ **To give more political weight to economic estimations of environmental benefits, further development of methodologies and a reliable data base are necessary**
- ⇒ **Not much experience conducting CBA in environmental policy in Germany**

Economic Elements of the MSFD – Research Project „CBA“

- ⇒ **“Impact assessments of measures in the context of the Marine Strategy Framework Directive with a focus on the benefit side of Cost-Benefit-Analyses”**
- ⇒ **Funded by the German Federal Environment Agency**
- ⇒ **Contract period: 1.11.2010 – 30.4.2012**
- ⇒ **Focus: benefit side of Cost-Benefit-Analyses**
- ⇒ **Objectives**
 - ⇒ **Evaluation methodology and blue-print for practically assessing environmental benefits of measures**
 - ⇒ **Expanding on the data base: inventory of existing benefit estimations**
 - ⇒ **Two Case studies (one possibly describing eutrophication) for checking if the methodology “works” in practice**

Economic Elements of the MSFD – Research Project „CBA“

⇒ **To meet those objectives, the following steps are/will be taken:**

- 1) Assessment of member states´ and regional cooperation institutions´ (HELCOM, OSPAR) methodologies regarding CBA and economic analyses in the context of MSFD (qualitative interviews with experts in FR, SWE, FIN, UK, NL and literature and document survey)**
- 2) Development of a quantity structure of relevant aspects**
- 3) Recommendations for monetizing these aspects**
- 4) Case Studies to prove practicability**

**Momentary status of work: between step 1
and step 2**

Economic Elements of the MSFD – Research Project „CBA“

⇒ **A few practical examples:**

- **Geographical scope: how/whether to include effects generated in neighbouring marine waters into CBA?**
- **Inclusion of coastal areas/WFD areas (<1 mile) into CBA?**
- **How far should the supply chain be analyzed with regard to benefits?**
- **Discount rates and time horizons for assessing environmental benefits..**

- **Small methodological issues with potentially great impacts on the results of any CBA.**

Economic Elements of the MSFD – Research Project „CBA“

⇒ Project team and tasks

- InterSus (lead; methodological concept for developing the quantity structure; one case study)
- FreshThoughts Consulting (Interviews and literature survey; methodological concept to develop the quantity structure)
- IER Stuttgart (quantity structure; one case study)
- Prof. Rehdanz/IfW Kiel (quantity structure)
- IFM GEOMAR (contribution to all tasks)
- Seeconsult (stakeholder workshop)

The project team is supported by an expert group, consisting of representatives of both federal and state ministries, agencies and research institutions.

Conclusions

- ⇒ **Many issues surrounding the impact assessments of measures in the context of the MSFD, including the CBA, are not clarified yet – neither in Germany, nor in other member states**
- ⇒ **OSPAR is very active regarding ESA, HELCOM within the boundaries of the Baltic Sea Action Plan**
- ⇒ **In some areas, the connections with WFD measures and areas have to be clarified (e. g. costal areas)**
- ⇒ **Also the inclusion of measures in either PoM (MSFD) and PoM (WFD), or both, has to be clarified with regard to the second management cycle of the WFD (from 2015 onward)**
- ⇒ **need for a reliable approach on how to include benefits of measures into decision making regarding measures selection**

Outlook

- ⇒ **Wetlands play an important role for both WFD and MSFD objectives, with two possible positive results:**
- **The importance of wetland restoration will be strengthened, as environmental targets have to be met in two important policy areas**
 - **Availability of funds for wetland restoration may increase if considered a relevant, cost-effective measure**
- ⇒ **How you could support us:**
- **sources of information regarding economic benefits of marine protection measures are very welcome!**
 - **participate and discuss with us at the stakeholder workshop presumably on 17/18th November**

Thank you for listening!



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Project information:

<http://www.umweltbundesamt.de/wasser/themen/meere/aktuelles.htm>