



Towards operational management of coastal eutrophication in Europe

CHARM Workshop
August 23-25, 2004 – Tõnismägi 2, Tallinn, Estonia

This workshop is directed to scientists, managers and national authorities interested in the implementation of the EC Water Framework Directive, monitoring strategies and coastal zone management in Europe

Background

The EC Water Framework Directive (WFD) provides national and local authorities with a legislative basis for the maintenance and recovery of water quality to achieve good ecological and chemical status for all surface water. The aim of the WFD is to prevent further deterioration and protect and enhance the environmental status of aquatic systems and to promote the sustainable use of water. The operational platform for the WFD includes management based on typologies, well-defined reference conditions and classification of ecological status, including adoption of management standards.

The WFD and the EC Habitats Directive require a system to classify ecological and conservation status in order to manage large-scale ecological processes and environmental driving forces more cost-efficiently. An important question is whether this can be done in practice? Do we understand structures and functions of marine ecosystems to the extent where management can operate? Are relevant driving forces known and/or quantified?

There is an urgent need for a functional typology in order to quantify relationships between loads and effects under a variety of physical regimes. Such a functional typology has not yet been established and validated for the European coastline. In addition, the WFD implies that key factors for ecosystem functioning and their relative importance is known. A number of recent regime shifts or catastrophic events, like oxygen deficits (hypoxia), fish kills and other marked changes in biological compartments, indicate that the conceptual understanding of the functioning of the marine environment is still lacking important knowledge.

The CHARM project (Characterisation of the Baltic Sea Ecosystem: Dynamics and Function of Coastal Types) represents one step on the strategic roadmap designed to combine science and management. The CHARM project has been developed to provide a

scientific foundation for fulfilling some of the requirements of the WFD. The products from CHARM are expected to lead to relevant methods, guidelines and recommendations, and thus ensure that the classification of ecological status of the Baltic coastal waters will be based on well-documented knowledge and validated high scientific standards.

The CHARM project has combined and analysed monitoring and research data from coastal areas all around the Baltic Sea. The region hosts more than one thousand different estuaries, coastal embayments and coast lines including deep Swedish hard bottom fjords, shallow Danish estuaries, low saline Baltic estuaries in addition to open coasts.

The structure of the work in CHARM includes seven workpackages. The first one is on development of a typology for the entire Baltic Sea. Four workpackages include work on specific quality elements (chemistry, phytoplankton, submerged aquatic vegetation and benthic fauna) and one on development of recommendations for future biological and ecological monitoring strategies. A final workpackage is devoted to present the information for environmental managers in the Baltic region and in Europe.

Aim of the Workshop

The aim of the CHARM Workshop "Towards operational management of coastal eutrophication in Europe" is to consider scientific possibilities and limitations in proving tools to manage coastal ecosystems along the lines of the WFD.

The themes of the workshops are:

1: Coastal Eutrophication and the EU Water Framework Directive

2: Typology and Habitats in the Baltic Sea

3: Chemistry and Phytoplankton: Reference Conditions and quality elements

4: Submerged Aquatic Vegetation and Benthic Fauna: Reference Conditions and quality elements

5: Linking ecosystem status with pressures

Venue:

The Workshop will be using the facilities of [Estonian National Library](#) located in centre of Tallinn, Estonia. Address of the meeting: Tõnismägi 2, Tallinn.

Registration and submission of abstracts

We encourage scientists, managers and national authorities to submit poster and oral contributions to the workshop. A fee has to be paid for all except CHARM participants.

The fee is 30 EUR. Please use online registration form available from workshop web page (www.sea.ee). Payment details are found at the same web page.

Registration should be completed and abstracts of oral/poster presentations should be sent not later than **1st July 2004** to Kaire Torn (kaire.torn@ut.ee). All abstracts should be sent in electronic format by e-mail as an attachment. Please indicate the name of the presenting author in the file heading, for example Martin.doc. Use MS Windows, Word, English (Br) lettering. Arial 10 pts and single line spacing. Indicate oral or poster presentation. The whole abstract, together with possible graphs and pictures must fit into one A4 page. No edition work is made by the Secretariat.

Organising committee:

- Bo Riemann, National Environmental Research Institute, Denmark (CHARM Project Coordinator)
- Georg Martin, Estonia Marine Institute, Estonia (Workshop Manager)
- Fredrik Wulff, Stockholm University, Sweden
- Anna Stiina Heiskanen, Joint Research Centre (JRC), Italy
- Erik Bonsdorff, Aabo Akademi, Finland
- Sif Johansson, Swedish Environmental Protection Agency, Sweden
- Gerald Schernewsky, Baltic Sea Research Institute, Germany

For further information:

Workshop web page: www.sea.ee

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