

## **Abstract ICES-poster – ICES CM 2005/R:34**

### **Abstract**

HAMOD - HArd bottom MODeling

GIS-modeling of hard bottom species distributions

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The overall goal of the HAMOD project is to develop a dynamic GIS model capable of modeling the spatial distribution of hard bottom species (reference conditions) and predict biological responses of human impacts. During the last years new management tasks like implementation of the EU Water Framework Directive (WFD) have created requirements for new spatial planning tools. GIS based models using basic physical criteria, such as wave exposure, depth and terrain variation, have been developed to indirectly predict the distribution of marine habitats. Norwegian Institute for Water Research (NIVA) holds long time series of physical, chemical and biological data from national monitoring programs, which represent a large source of data to develop these models further. So far, available exposure models have been evaluated and compared with biological data and physical, chemical and biological data have been extracted from data bases and literature and arranged in a conceptual model. Results from the conceptual model will be transferred into a GIS-environment for modeling of species distributions. HAMOD also cooperate with the modeling project of the marine part of the national program on mapping and monitoring of biological diversity, on developing methods for habitat modeling and field validation. This project receives funding from the Directorate of Nature Management, the Fisheries Directorate and Ministry of Defense

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