

## Panelist Abstract

**Panelist:** Michael E. Huber, Vice-Chair, GESAMP

**Name of Session:** Session X. Two Concurrent Thematic Sessions - Coastal/Marine/LME Issues

**Presentation Title:** GESAMP Assessments of the Health of the Oceans

### **Summary of Key Issues and Best Practices/Lessons Learned**

GESAMP is a multidisciplinary group of independent natural scientists, social scientists, and economists, sponsored by 8 United Nations Organisations. GESAMP has two primary functions:

- To conduct periodic assessments of the state of the global marine environment; and,
- To evaluate specific marine environmental topics and provide advice relating to the scientific aspects of marine environmental protection. GESAMP originally focused on marine pollution but has broadened its scope to consider all aspects of marine environmental protection.

GESAMP has recently completed two reports assessing the state of the global marine environment and recommending priorities for action. *A Sea of Troubles* is a concise report aimed at decision-makers and the public at large. *Land-based Sources and Activities Affecting the Quality and Uses of the Marine, Coastal and Associated Freshwater Environment* (LBA Report) is a detailed report requested by UNEP as a contribution to the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA).

In the LBA Report, GESAMP assesses the nature and severity of land-based threats to the marine environment posed by physical alteration and the eight classes of contaminants identified in the GPA, strategies and measures to mitigate these threats, and priorities for action. The threats are prioritized on the basis of the severity and scale of impacts and prospects for management. GESAMP concludes that at the global level the most serious problems associated with land-based activities are, in priority order, physical habitat alteration, sewage, nutrients, and altered sediment flows. This prioritization is generally consistent with that of the 15 regional programmes examined, but there is a tendency for the regions to give higher priority to POPs and heavy metals, and less to physical alteration. Other contaminants are of high priority in specific regions. GESAMP concludes that the economic costs and public health implications of not controlling land-based activities are enormous and are escalating. Of sea-based activities, GESAMP considers the effects of fishing, both direct and indirect, to be of highest priority, comparable to that of the most serious land-based threats.

GESAMP concludes that the root causes of marine environmental damage from land-based activities are poverty, poorly managed social and economic development, and unsustainable consumption patterns. It recommends that the most urgent actions to control land-based activities to improve the quality of the marine environment be:

- Prevent habitat destruction and loss of biodiversity through education combined with the development or enforcement of legal, institutional and economic measures appropriate to local circumstances; and establish protected areas for habitats and sites of exceptional scenic beauty of cultural value;
- With respect to pollution, devote primary management attention to sewage, nutrients (especially nitrogen) and sediment mobilization; and
- Design national policies that take account of the economic value of environmental goods and services and provide for the internalization of environmental costs.

### **Key References**

GESAMP web site: <http://gesamp.imo.org/>

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