

ENCORA - Theme **POLLUTION**

prevention, detection and mitigation

initiative for a **Coordination Action** within the European coastal research **and** practitioners community

WHY ?

➤ **Diverse sources of pollution threaten the water quality in the coastal zone ...**

- oils and paintings from the ships;
- harbour runoff containing a mixture of contaminants including oils, oil emulsifiers, paints, solvents, detergents, bleach, antifouling paint scrapings;
- ships' passages and dredging operations that increase the suspended solids contents in the water. These sediments are likely to be polluted by heavy metals and organic micro-pollutants;
- diffuse and point source land-based pollution resulting from agriculture, industry, and urban settlement;
- ship accidents or industrial accidents with their environmental impact due to oil spill or chemical pollution;
- storage of wastes including polluted dredged materials
- regular discharge of wastewaters from coastal outfalls;
- resulting problems with eutrophication, nutrients, sewage and storm water treatment;

Seas and coastal zones are fragile areas. A bad water quality damages their natural resources, their environment and their attractiveness. A bad water quality endangers human activities like fishery or tourism. Integrated Coastal Zone Management through new regulations, organizations and techniques can improve prevention, detection and mitigation of pollution.

WHAT ?

➤ **Major unresolved issues**

1. Diagnosis of pollution state

- Observation system of pollutants;
- Presence of zones of eutrophication in coastal waters due to nutrients;
- Development of scientific assessment tools, such as modelling, remote sensing and risk assessment strategies;
- Risk analysis of ecosystems through indicators of sensitivity to nuisances;
- Impacts of releases of pollutants on national coasts and coasts of adjacent countries;
- Information on origin, intensity and nature of nuisances;

- Objectives of water quality wished in the coastal zones.

2. Prevention and mitigation of chronic pollutions

- Protection and rehabilitation of sensitive ecosystems;
- Design of infrastructure for collecting solid or liquid waste and treating all kinds of effluents;
- Impact of flood control and extreme weather events on the design of sewage and storm water infrastructure.

3. Detection, prevention and mitigation of accidental pollutions

- Crisis management for accidental pollutions;
- Techniques for collecting and treating pollutants;
- Techniques for protecting sensitive areas (floating barrier);
- Tracking and meteorological information system for accidental pollutions, dredging operations or other activities;
- Development of real-time monitoring systems for early warning.

4. Information of public, users and practitioners on pollution issues

- Regulations and resolutions of conflicts between coastal activities;
- Adaptation of information to the public profile;
- Training of practitioners.

HOW ?

Networking and exchanges between stakeholders, engineers, scientists and legislators.

- **Intertwining of existing projects**
- **Communities of Practice**
- **Survey and workshops**
- **Exchange visits of young researchers and practitioners**
- **Good practice and policy guidelines**
- **Decision support systems and data base**

WHO ?

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