

COASTAL ACTION PLANS

THEME 4

Pollution, prevention, detection and mitigation

TITLE	The fate and impacts of contaminated sediments
WHY	<p>Increased risk of indirect impacts due to dredging and change in dynamics → Development of ship traffic, bigger ships Lack of appropriate knowledge to support regulations</p>
WHAT	<p>Better understanding of interactions between pollutants, sediments and bottom water, including integrated assessment of ecological and socio-economic impacts leading to harmonisation of regulations</p>
HOW	<p>Scoping exercise of different regulations in Europe, and of current state of contaminated sediments, inventory of quantity and quality of contaminated sediments in Europe Fundamental research and coupled transport-biogeochemical modelling Data acquisition with full scale experiments Development of an appropriate ecosystem health index Involvement of local practitioners : port authorities, dredging companies, fishermen</p>



COASTAL ACTION PLANS

THEME 4: Pollution, prevention, detection and mitigation

TITLE	Quality of nearshore and transitional waters
WHY	Pressure of human activities in the coastal zones, including coastal watershed Climate change
WHAT	Understanding and forecasting of transport and mixing of pollutants in nearshore waters Interaction between groundwater and sea water Alterations in biogeochemical processes and nutrient and oxygen conditions Assessment of forcing factors controlling biodiversity and ecosystems functioning Socio-economic evaluation of impacts
HOW	Fundamental research about transport and mixing processes at different spatial and temporal scales Use of remote sensing and modelling tools for forecast and scenario analysis Optimizing design of observation and monitoring networks for surface and groundwater Integrated assessment of nearshore and transitional waters (eutrophication and anoxia, biological and chemical pollutants) Conceptual tools and protocols for long term assessment of impacts of pollution on ecosystems Development of sensitivity index and sensitivity and vulnerability maps