



EFFECTIVE PRACTICES to MANAGE the IMPACT of HUMAN ACTIVITIES on the MARINE ENVIRONMENT.



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Promoting Effective Governance
of the Channel Ecosystem
Promouvoir une gouvernance efficace
de l'écosystème de la Manche

Best practice within sustainable energy projects (MERiFIC, OFELIA) include

- Appraisal of projects should be done in the context of ecosystem stressors and receptors
- Mitigation of environmental impacts requires good understanding of the impact of marine renewable energy devices at different scales
- Colocation of different devices (wind, wave) should be considered – reduces environmental impacts
- Need to consider synergies – MRE devices + fish stock restoration, aquaculture, leisure etc.
- Best practice recommendations on disturbances caused by MRE devices (e.g. risk of collision, electromagnetic fields, impacts on wildlife and fish stocks) are needed
- Measures are needed to enhance integration and public acceptance of MRE projects – to avoid social/economic impacts

Issues of marine pollution and oil spills (CAMIS) include:

- Risk of spills is not falling – changing/becoming more complex because of high density of shipping, transport of dangerous goods, difficult navigation conditions etc.
- Marine pollution impacts on human health, causes environmental damage and has economic consequences

Cross Channel Declaration on Shipping Incidents and Marine Pollution (CAMIS) → commitment at local and regional level for common action in the face of marine pollution from ships for:

- Improved cooperation, information and communication
- Dissemination of information on pollution to reduce risks
- Using information to identify correct tools required to deal with specific types of pollution (chemicals need different tools to oil).

Hazardous and Noxious Substances Spill Incident Database (ARCOPOLplus) will support marine pollution clean-up activities.

- In European marine sites, management of commercial fishing is based on assessing whether fishing is compatible with the requirements of those sites – a risk assessment approach
- PANACHE highlights that improved fisheries management in designated areas can result from:
 - Use of accurate maps of different types of fishing activities in the implementation of marine policies, development of marine spatial plans etc.
 - Use of information on fishing to identify areas where pressures and impacts on the environment are most intense
 - Consideration of how implementation of spatial plans will impact on the industry
 - Improved knowledge can also result in reduced conflict among stakeholders

Governance for environmental quality management takes place at international, European and national levels. Shared information (e.g. for sediment recovery under SETARMS) can help identify best practice.

Range of environmental issues in the region include:

Dredging

when to dredge (impacts on biodiversity); where to dredge (chemical content etc.); what to do with the dredged material (type of material, disposal)

Control of solid and liquid pollution

wide range of pollution sources including dredging, land-based activities, ports, upstream pollution (urban run-off, agriculture) etc.

Macro-waste management

e.g. waste dumping from boats, lack of facilities to dispose of waste appropriately

Control of Invasive Species

- Cross-channel and coastal navigation between harbours can transfer non-native species (macroalgae, invertebrates and plankton) around the Channel
- Harbours and marinas provide artificial habitats (Marinexus)



*Invasive kelps *Undaria pinnatifida* growing on floating marina pontoon (foreground) and on a vessel hull (background). (© Wilfried Thomas / Station Biologique de Roscoff)*

Awareness raising and education of harbour managers and boat owners may help:

- Effectively monitor the spread of invasive species
- Respond to the problem
- Marinexus provides a guide to identifying non-native species for the English coast of the Channel (similar guide planned for the French coast)

Practical measures – e.g. hull scraping – may also help to limit the transfer for non-native species

Emergent technologies

need environmental effect assessment of both positive and negative impacts of technologies, colocation opportunities etc.

Marine pollution from ships

need to develop databases of past pollution incidents and tools to respond to future incidents

Ecosystems within designated conservation areas

consider how to manage fishing activities in these areas

Issues of environmental quality

look at the benefits of dredging (accessibility and safety of waterways, use of dredged sand and gravel), plus when and where to dredge

Non-native species

need to carry out further work on mechanisms through which they are spread and measures to minimise their impacts