

## **Executive summary to the legal, administrative and practical constraints to dredging in small UK estuaries study**

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Estuaries have long been important to mankind for navigation, the location of ports, towns and cities, and the extraction of natural resources, remaining highly favoured today as prime locations for industry and development. Transport by shipping is vital to both domestic and international commerce, with large multi-faceted ports through to smaller, more specialised cargo, fishing and recreational harbours all situated on estuaries. Whilst small ports might be less significant economically on a national scale, they are crucial at local level, and in combination, their contribution to the UK economy is substantial. More often than not, these same estuaries are subject to some form of national or international conservation designation for their wildlife and landscape value, illustrating their importance in terms of the habitats within them and the communities that they sustain.

Capital and maintenance dredging is of major importance to the economic survival of many European estuaries, both large and small, being essential to both commercial and recreational activities. Consequently, problems relating to navigation and access within estuaries are fundamental, not only when considering shipping to major commercial ports and harbours, but in sustaining the socioeconomic stability of small communities that depend on industries such as tourism and recreation, whilst at the same time safeguarding the natural environment.

By its very nature the act of dredging has an environmental impact, and extensive studies are now required to assess the potential impacts of any proposed works, and to supply and implement appropriate mitigating measures before consent is given. Increasing levels of environmental legislation means that the current system for granting licences is now excessively complex and constrained, involving unnecessary duplication and overlap, and proving costly and confusing for both business and regulators alike. The numerous ways in which dredging and disposal operations could be used to positively improve the environment is also severely restricted, resulting in an uncertain future for many small ports and their dependant industries.

Falling under the *Physical Processes* theme of the EU Cycleau Project, the following thesis identified existing constraints to dredging in small UK estuaries, proposing measures and opportunities to effectively overcome or mitigate them in the future. An initial review of current dredging and disposal practices in select UK estuaries demonstrated the ‘need’ for dredging and its inherent environmental impacts, thereby highlighting potential areas of constraint. Identified constraints were then evaluated in the context of the legal and administrative frameworks within which existing licencing procedures currently operate. Using a semi-structured interview technique, primary data was gathered from key personnel from both regulating authorities and five small case study estuaries in southwest England in order to identify the legal, administrative and practical constraints to dredging. Comparative analysis then enabled a prioritisation of case study responses in terms of the need for mitigation, and recommendations to be made on future dredging and disposal practices in the UK. Since much existing UK legislation relating to projects in the marine environment is derived from European and International Conventions, it is probable that many other European countries will have similar legislative frameworks in place. Accordingly, it is anticipated that the study outcomes will be of value to other signatory countries, EU Member States and Devolved Administrations.

The EU decision to treat maintenance dredging as a plan or project under the Habitats Regulations, and the definition of dredged spoil as ‘waste’ under the Hazardous Waste Directive, represent perhaps the most fundamental constraints to dredging and disposal operations in the UK at the *present* time. In addition, whilst the extent of its influence remains unclear, the EU Water Framework Directive looks to pose the greatest *future* threat to such works in anticipation of more stringent controls on water quality. Establishing dredging policies and protocols for individual estuaries would act to better guide and inform decisions, whilst a redefinition of dredged material as a *resource*, rather than a *waste*, would facilitate the much needed *Alternative/Beneficial Use* of dredged spoil, particularly where sediments are contaminated and therefore unfit for sea disposal. Overlapping jurisdictions in the inter-tidal zone complicate the situation, and guidance on how sediments should be defined, and subsequently dealt with, would be advantageous.

Combining existing licensing regimes into one single Act covering both the dredging *and* disposal would bring all potentially damaging, and currently unlicensed, forms of dredging under much needed regulatory control. Unnecessary repetition, delays in licensing, and the overall administrative burden on the applicant could be effectively averted, making the process more efficient and effective. Improved communication networks and consultation mechanisms, such as an online, low-threshold, fast-track route for smaller schemes, and the much-advocated ‘one-stop-shop approach’, would ensure greater openness and transparency, an enhanced level of accountability and a common point of reference for applicants. By implementing *statutory* consultation procedures with supporting guidance, the length of time needed for consultation would be reduced, aiding a more rapid turnaround of licence applications. A more streamlined and responsive system would also facilitate a reduction in mobilization and demobilization costs, vital to the long-term economic sustainability of ports and harbours in small estuaries. A ‘targeted’ approach to dredging, based on extensive hydrodynamic and bathymetric studies of the individual estuary, and from which the aforementioned dredging policies/protocols are derived, could significantly reduce the scale of dredging required and the accompanying financial burden.

Whilst there are irrefutable drivers to keep ports open through dredging, there has to be a fair appraisal of the environmental consequences of doing so. Despite the substantial costs associated with it, dredging is a fundamental and necessary evil because from a commercial and economic perspective, the benefits derived from it outweigh many of its negative environmental impacts. If dredging and disposal operations become constrained to the point where ports are no longer able to continue because, for example environmental constraints became too costly and constraining, their very future could be threatened.

The proposed Marine Bill (2007) presents an unprecedented opportunity to resolve many of the issues, maintaining a strategic and holistic approach to dredging and disposal, considering environmental, economic and social factors in the context of both the individual estuary and the country as a whole, which is essential when balancing potential economic gain with environmental loss. Future dredging operations should be fully assessed in the context of the range of constraints identified in this study, since only then will the ports and harbours of small estuaries in

particular be able to sustain their vital contribution to local, regional and national economies, whilst operating in the most environmentally sensitive manner possible.