

## Dredging and reclamation

Complete project support from inception to realisation



## Solutions based on expert knowledge

Dredging and reclamation are specialist fields of engineering. These activities are often a key part of development projects and can have a major impact on project cost and programme. It is therefore essential that works are designed, managed and completed to the highest standards by those with specialist knowledge in the field.

HR Wallingford has been providing authoritative advice and support to developers, operators, contractors, regulators and consultants involved in dredging and reclamation for more than 20 years.



### International expertise

HR Wallingford's expertise in dredging and reclamation is recognised internationally. We cover a wide range of disciplines, from hydraulics and geotechnics, to dredger modelling and marine surveys. Our work is underpinned by a programme of applied research which we share with the broader industry via publications, conference and active involvement in professional associations such as CEDA.

### Managing risk to realise opportunities

Dredging and reclamation activities represent risks to project cost and programme. Active management of these risks is key to successful project delivery.

Conversely, these activities represent potential opportunities to reduce costs and shorten project schedules. When appropriate expertise is brought to the initial phases of project development, substantial budget and schedule reductions can be made.

HR Wallingford has highly experienced, dedicated experts available to support our clients globally, whether managing risks or realising opportunities.

## Supporting dredging and reclamation

We offer a complete range of services in support of dredging and reclamation activities. Regardless of the size of the project or the nature of the work, HR Wallingford can add value through:

- > project design and optimisation
- > predicting and monitoring environmental effects
- > costing and scheduling works
- > tendering and tender assessments
- > contract negotiations and resolution of disputes
- > site supervision and auditing.

## Site supervision, auditing and monitoring

We represent our clients on-site and support them during the period that works are undertaken.

- > plant inspection and condition assessments
- > plant downtime assessments and auditing of productivity levels
- > supervision of environmental monitoring and environmental threshold implementation
- > analysis, interpretation and quality assurance of monitoring data.

## Contracts, tenders and disputes

HR Wallingford has extensive experience of tender assessment, forms of contract and optimum methods of measurement and payment, contract conditions and resolution of claims and disputes (including expert witness).

## Design and optimisation

The design stage represents the foundation of any project; if it is done well it can yield substantial cost and schedule savings. The design of dredging and reclamation projects encompasses aspects such as:

- > ground conditions
- > exposure of the site to waves and currents
- > the optimum choice of plant
- > use and / or disposal of sediments
- > prediction of environmental impacts
- > the site set-up
- > sequencing of construction
- > cost prediction and scheduling.

For major developments it is important that there is adequate understanding of all design components. Our expertise in the design of coastal structures, engineering, navigation, hydrodynamics, sediment transport and marine monitoring is recognised internationally. HR Wallingford's strength and breadth of knowledge allows a truly integrated approach to design.



**HR Wallingford**  
*Working with water*

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HR Wallingford is an independent engineering and environmental hydraulics organisation. We deliver practical solutions to the complex water-related challenges faced by our international clients. A dynamic research programme underpins all that we do and keeps us at the leading edge. Our unique mix of know-how, assets and facilities includes state of the art physical modelling laboratories, a full range of numerical modelling tools and, above all, enthusiastic people with world-renowned skills and expertise.

