



DHI MARKET AREA: SURFACE & GROUND WATER

WATERSHEDS

Integrated approaches to water resource management

It's an often unappreciated fact that all of mankind lives in a watershed. Human activities in one part of a watershed invariably create impacts in other parts. Watershed management strategies may be developed in different parts of large watersheds, by different authorities, often with conflicting interests. Watersheds often cross administrative boundaries, making it difficult to ensure the best outcome for the watershed as a whole. Multiple users are often trying to access the same scarce water resource, which may be insufficient to meet all the demands at any one time.

At DHI, we've achieved a leading position within the field of Integrated Water Resource Management (IWRM) and pioneered these approaches to support watershed planning authorities around the world. We're host to a number of international knowledge centres — run in cooperation with UNEP, WHO, Danish Water Forum and Global Water Partnership — dedicated to working towards the integrated management of water, environmental and coastal resources.

THE CHALLENGES

- Dealing with growing requirements of scarce water resources
- Managing downstream impacts of upstream actions
- Organising segregated planning amongst dispersed authorities
- Developing and managing allocation schemes
- Dealing with the impacts of climate change
- Managing and forecasting droughts
- Addressing waterlogging issues
- Consolidating data and information
- Restoring and managing lakes, wetlands and estuaries

OUR APPROACH

At DHI, we see integration as the key: cross-sector integration of policy and planning, considering surface water and groundwater as one common resource, and tackling water quality and quantity issues together. With customisable information and modelling systems, we can help you plan, manage and allocate your precious water resources to optimise the benefits for all.

OUR SOLUTIONS

- Tailored information management systems to support decision-makers and planners
- Water availability and its reliability studies
- Integrated hydrological, hydraulic and water quality modelling
- Institutional capacity development
- Drought monitoring and warning systems
- Support via international knowledge centres
- Planning and operational Decision Support Systems (DSS)

THE ULTIMATE GOAL ENABLING EFFICIENT WATERSHED MANAGEMENT

Over **1.4 billion people** currently live in river basins where the use of water exceeds minimum recharge levels

OUR TOOLS AND SERVICES

We can provide you with a range of solutions to help you manage watershed resources effectively. These include:

- national and trans-boundary water resource planning
- urban and rural water master plans
- integrated surface-groundwater resource assessments
- Environmental Impact Studies (EISs)
- information management and DSS
- policy advice on institutional, regulatory and management frameworks
- institutional development and strengthening
- MIKE Powered by DHI software tools:
 - MIKE BASIN
 - MIKE 11
 - MIKE 21
 - MIKE SHE
 - PLANNING
 - REAL TIME
- Aqua Republica – training through serious games
- capacity building and training by THE ACADEMY by DHI

Contact us: info@dhigroup.com
For more information, visit: www.dhigroup.com