



DHI MARKET AREA: SURFACE & GROUND WATER

ENVIRONMENT

Healthy aquatic ecosystems – the foundation for sustainable development

The value of healthy rivers, lakes, and wetlands for economic growth and human well-being is widely recognised by authorities and communities around the world. With growing populations and the need for food and housing, the ecosystems we depend on are coming under increasing pressure. Dams for example, can be highly disruptive to ecosystems. However, with the right knowledge and tools, they can be managed to minimise environmental impacts. Moreover, the effective employment of natural processes can often provide a more cost-effective alternative to expensive traditional engineering solutions for flood management and water treatment.

THE CHALLENGES

- Dealing with the increasing pressures on finite resources
- Balancing new developments against the needs of the environment
- Assessing the impacts of proposed changes to surface and groundwater ecosystems
- Forming effective environmental protection strategies
- Developing surface and groundwater remediation plans
- Identifying and tracking sources of pollution
- Managing and reducing nutrient runoff
- Restoring polluted or damaged waterways

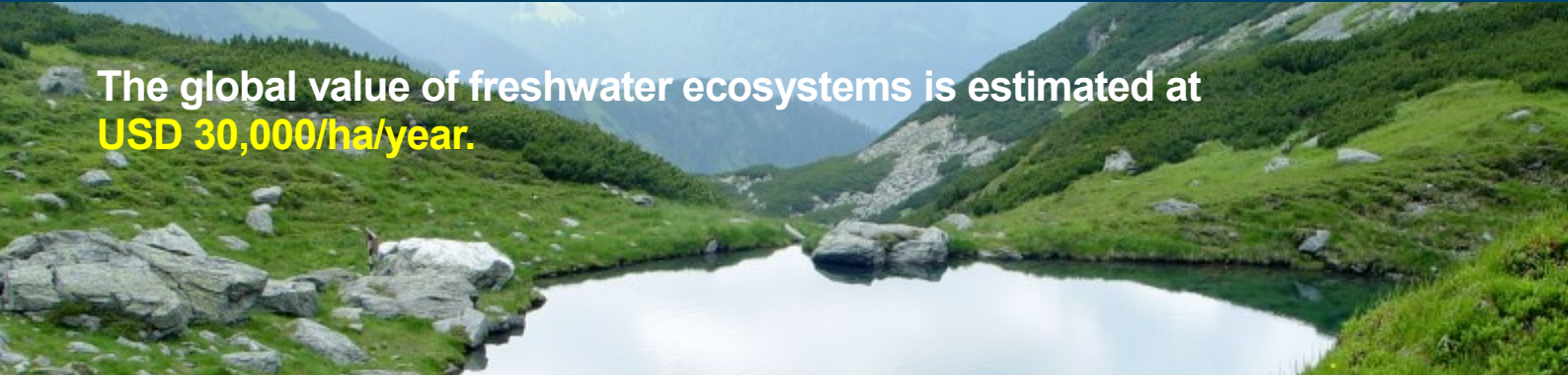
OUR APPROACH

Our advanced environmental, ecological and habitat response models allow us to build up a sound scientific understanding of the local ecosystem. From this understanding we develop innovative approaches to solve challenges in river restoration, threatened species management, river basin scale water quality management and advanced impacts assessment studies in river, estuarine and groundwater ecosystems.

OUR SOLUTIONS

- Water quality and water process modelling
- Ecology and habitat response modelling
- Agent Based Modelling (ABM) for aquatic biota response and management
- Wetland management
- Management of watershed runoff quality
- Investigation of agricultural practices
- Environmental flow analysis and augmentation
- River management and restoration
- Real-time monitoring and reporting
- Decision Support Systems (DSS)

THE ULTIMATE GOAL HEALTHY AQUATIC ENVIRONMENTS AND ECOSYSTEMS



The global value of freshwater ecosystems is estimated at **USD 30,000/ha/year.**

OUR TOOLS AND SERVICES

We offer a range of tools and services to help you effectively preserve and maintain healthy ecosystems and environments. Our tools and services include:

- integrated water quality and quantity modelling
 - regulatory compliance audits
 - Environmental Impact Assessments (EIAs) and management plans
 - waste and cooling water dispersion studies
 - thermal pollution investigations
 - eutrophication studies and mitigation strategies
 - diffuse pollution estimation and reduction
 - baseline studies and assessments
 - field monitoring and data analysis
 - software customisation
- MIKE Powered by DHI software tools:
 - MIKE ECO Lab
 - MIKE SHE
 - FEFLOW
 - MIKE BASIN
 - MIKE 11
 - MIKE 21
 - MIKE FLOOD
 - PLANNING
 - capacity building and training by THE ACADEMY by DHI

Contact us: info@dhigroup.com
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