DHI MARKET AREA: URBAN WATER

RECREATIONAL WATER

Striking a balance between all uses of urban water

Sewage outfalls, storm water overflows, plant releases, agricultural production effluents – water bodies in urban areas are subjected to many polluted discharges. When these water bodies are also used for recreational purposes, the safety of the population is at risk. Ensuring safe discharges into recreational water is therefore crucial for human health.

In addition to local populations, flocks of tourists enjoy seasides, rivers and lakes across the world each year. Tourism is the world's third largest industry and the prime economic sector in some regions. It cannot be compromised by health incidents or concerns. Meeting water quality standards and providing easily accessible and timely information to the public is therefore a burning need today.

THE CHALLENGES

- Minimising the impacts of sewage and other pollutant sources on urban water environments
- Accurate and timely monitoring of water quality in recreational water bodies
- Providing near real-time alerts about human health threats to recreational water users
- Supporting cost-effective water utility investments and regulatory approvals
- Planning and designing safe recreational water areas
- Minimising impacts of infrastructure projects (Environmental Impact Assessments)

OUR APPROACH

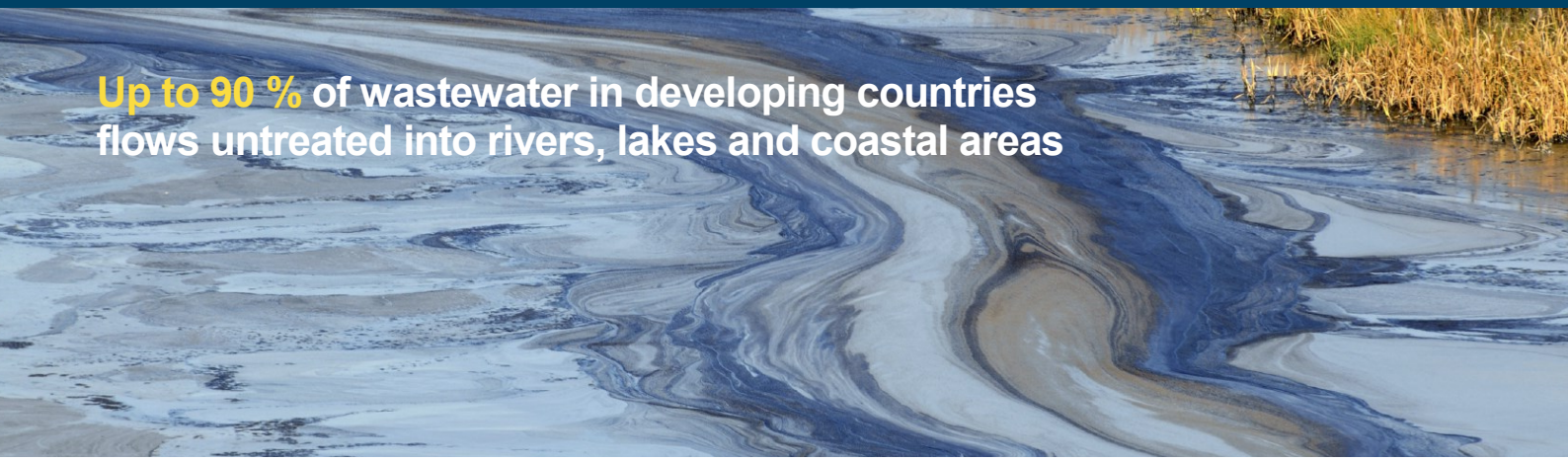
At DHI, we support municipalities, authorities responsible for water statuses, the private sector and the tourism industry in enabling safe recreational use of water bodies. To do so, we exploit our in-depth knowledge of water environments and our high-performance tools and technology. We can therefore help you reduce the impact of pollutant discharges, meet regulatory standards, monitor water quality and provide your users with timely information.

OUR SOLUTIONS

- Water quality impact assessments
- Recreational (bathing) water quality forecasting and information on various media
- Health risks and safety planning
- Climate change adaptation
- Physical coastal planning
- Design of recreational areas and waterfronts
- Modelling-based Environmental Impact Assessments (EIAs)

THE ULTIMATE GOAL

SAFE RECREATIONAL WATER BODIES



Up to 90 % of wastewater in developing countries flows untreated into rivers, lakes and coastal areas

OUR TOOLS AND SERVICES

We can provide you with everything you need to manage and maintain safe recreational waters. Our tools and services include:

- bathing water forecast and quality information
- dynamic modelling
- sustainable environmental conditions
- monitoring of water quality
- pollution assessment and remediation
- health risks and safety planning
- coastal water dilution tool
- tools for managers and the public
- capacity building and training by THE ACADEMY by DHI
- MIKE Powered by DHI software tools:
  - MIKE+ (urban water, river, and flood modelling)
  - MIKE HYDRO Basin (multi-purpose, GIS-based river basin simulation)
  - MIKE HYDRO River (river modelling, including ecological and water quality assessments)
  - MIKE 21 (2D modelling of coast and sea — simulates physical, chemical or biological processes)
  - MIKE 3 (3D modelling of coast and sea)
  - MERMAID (GIS system containing facilities to store surveillance data, calculate statistics according to the EU Bathing Water Directive and view surveillance results on maps)
  - DIMS.CORE (data integration and business processes)

Contact us: info@dhigroup.com
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