EOMAP
a Fugro company

Enhancing governmental reporting

ENVIRONMENTAL MONITORING FROM SPACE

Authorities and government stakeholders can rely on our water quality monitoring services for reporting related to directives. Smart Earth Observation (EO) solutions provide harmonised data on important parameters, such as chlorophyll, turbidity and cyanobacteria, across large bodies of water. This strengthens compliance, reporting and environmental management efficiency.

To effectively monitor water quality, you need to capture dynamics across space and time. EO facilitates both retrospective analysis and near real-time assessments in high resolution. It rapidly delivers the insights required for robust compliance, trend detection, and adaptive management.

CHALLENGE ACCEPTED

+ Dynamics due to climate change, extreme events, and algal blooms
+ Limited funding and personnel for large-scale, regular monitoring
+ Cross-border data harmonisation and joint assessments
+ Lack of knowledge on ecological states of most water bodies, especially in remote or coastal areas
+ Informing the public in time

WHY BUILD ON EOMAP SERVICES

- **Proven Expertise**
  20+ years of experience in EO-based aquatic monitoring.
- **Harmonised & Validated Data**
  Consistent, comparable, validated, and sensor-agnostic results – no in situ calibration required.
- **Scalable, Physics-Based Insights**
  Robust, science-driven algorithms enabling efficient monitoring from single lakes to entire regions.
- **Directive Compliance**
  Tailored solutions for WFD, MSFD, BWD, and other regulatory frameworks.

Contact us
directives@eomap.com

OUR SOLUTIONS

Water Framework Directive (WFD) Monitoring

EO data provide frequent, spatially detailed measurements (chlorophyll, turbidity, Secchi depth) to assess ecological status, support management programmes, and efficiently close data gaps for WFD compliance.

Bathing Water Directive (BWD) Monitoring

Near-real-time detection of harmful algal blooms and water quality risks provides early warnings and continuous surveillance, ensuring safe recreation and simplifying BWD reporting, even for small or remote sites.

Ecological State Monitoring

Physics-based algorithms convert EO data into nutrient and eutrophication indicators, such as trophic state or hotspot detection, enabling efficient, large-scale assessments and targeted management.

Climate Change Monitoring

EO solutions enable long-term tracking of trends in water temperature, extent, and quality, helping assess climate-driven changes, plan adaptive measures, and meet climate-related reporting requirements.

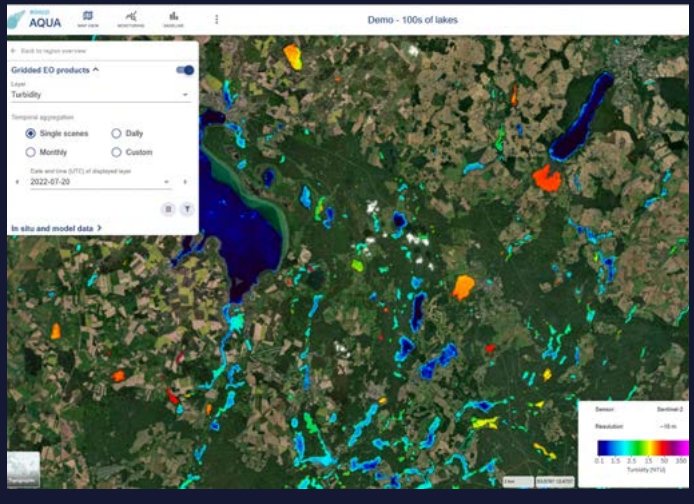
Macrophyte Monitoring

We help you detect and quantify submerged and emergent macrophyte coverage to enable efficient habitat assessments, biodiversity monitoring, and management of vegetation changes and invasive species.

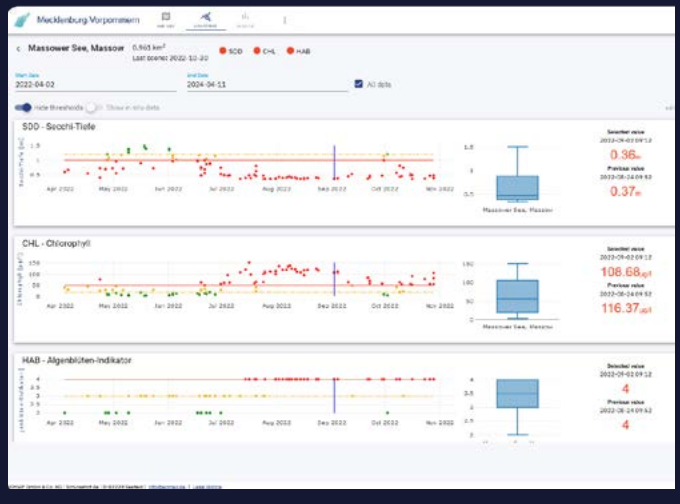
eoapp AQUA

The web app provides intuitive dashboards, alerts, and reports using sensor-agnostic algorithms, offering tailored spatial and temporal resolution for scalable, application-specific monitoring of any water body.

USE CASES



Water quality analysis of extended lake ensembles | long term assessments of chlorophyll concentrations and trophic state analysis have supported WFD-related lake management and identifying a baseline of ecological states (Northeast Germany).



Near real time analysis for BWD monitoring | very high-resolution monitoring of algal blooms in EU bathing waters by measuring chlorophyll, Secchi Disk Depths and Harmful Algae Bloom (HAB) indicators in Northeast German bathing waters.

Learn more
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