

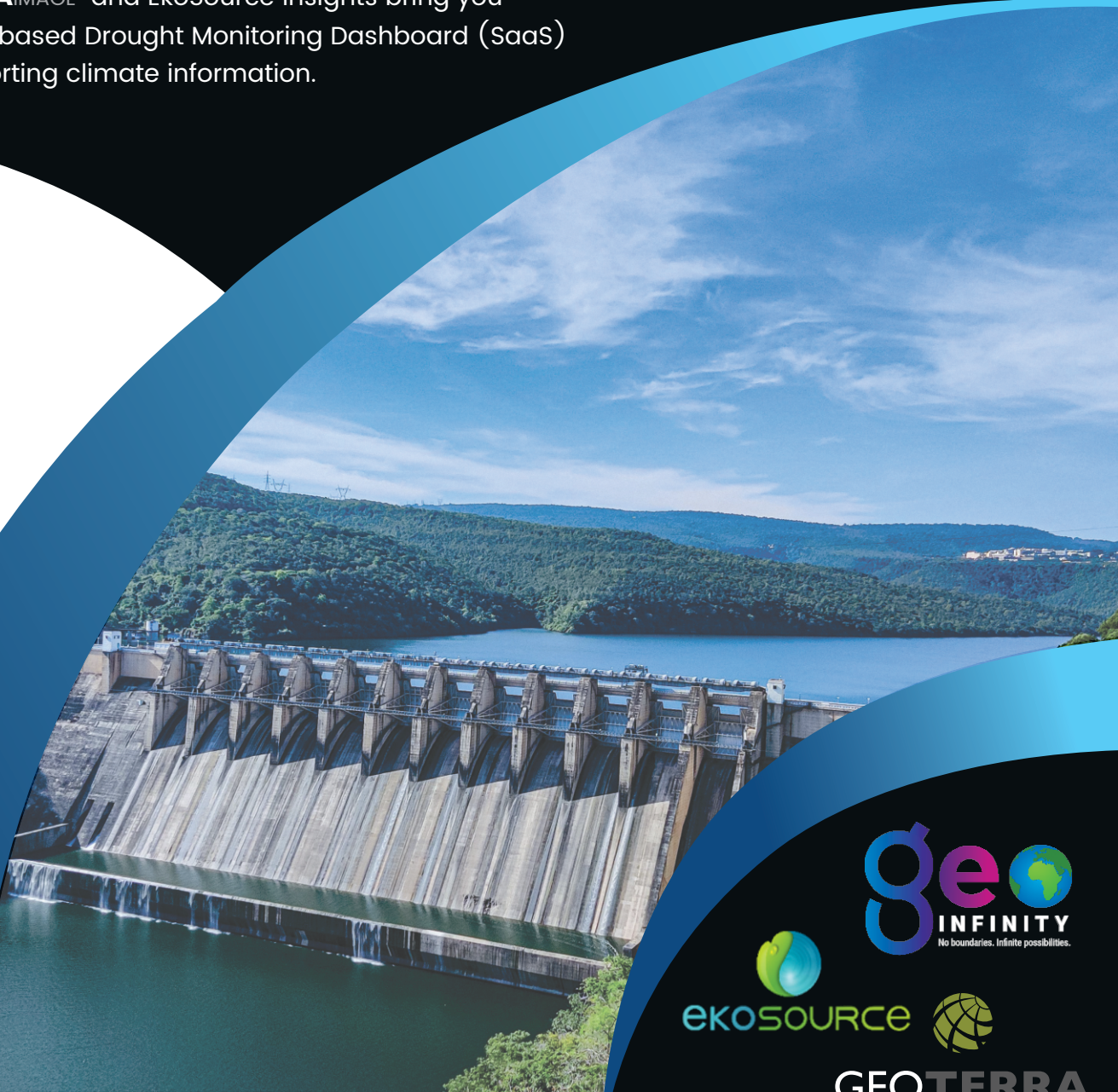
Intelligent Information for Water Resource Management



WaterSphere360

Critical Water Intelligence Reporting Platform, updated monthly with decision-ready information for all available surface water bodies, in direct support of Sustainable Water resource Management and Climate Risk Mitigation.

Based on over 25 years of specialist knowledge and experience, **GEOTERRA**IMAGE and EkoSource Insights bring you a volume-based Drought Monitoring Dashboard (SaaS) and supporting climate information.





WaterSphere360

Why monitor the Water Landscape?

Water is a critical and scarce resource in many areas globally and is likely to become even more so as the regional impacts of global climate change become more self-evident. Successful management of such a scarce but vital resource is critically dependent on the availability of accurate, regular, informative and reliable information.

In **WaterSphere360** we provide a first of its kind, unique global information service that offers water resource managers and water-use communities with easy to access, up-to-date intelligence (every month) on the status of available water resources.

This unique service, utilizing advanced Earth Observation technologies, produces invaluable intelligence on the location and volumetric quantification of surface water resources – complimented by water quality, precipitation, and ground-water status indicators – enabling historical, current, and future water resource conditions to be determined, monitored and predicted, using a single, integrated service.



Advantages of WaterSphere360:

Enhanced operational water resource management



Quantifiable water resource intelligence, every month, across the full extent of your target area.



Cost-effective to set-up and run, compared to a network of field-based instrumentation.



Requires only web-connectivity to access and benefit from the service.



Provides direct support to both geospatially enabled and non-geospatial end-user communities.



Rapid implementation over new monitoring areas, regardless of location or extent.

Unique Features of WaterSphere360:

- 🔥 A world-leader in generating quantitative water volumes from satellite-only detected surface water extents.
- 🔥 All inclusive, full landscape water content monitoring and inventory.
- 🔥 Fully scalable from individual catchment to national and/or international transfrontier basin coverage.
- 🔥 Supports and promotes transparent, open data democracy.
- 🔥 Quality data provision support to existing tools or direct service support (enhanced knowledge).
- 🔥 Does not require any costly in-situ field instrumentation nor office IT infrastructure investment.

WaterSphere360 Capability Overview



Our operationally proven monthly water monitoring service generates affordable, user-ready, up-to-date water resource status information. It covers the full water landscape from precipitation input, water location and extent, storage volumes, and associated environmental impacts. This unique service is easily accessible via web-based information dashboards, which include a download capability supporting a variety of formats including GIS compatible digital data.

WaterSphere360 is a unique information service that provides water resource managers and water-use communities with easy to access, up-to-date intelligence, every month, on the status of available water resources.

WaterSphere360, utilizes advanced Earth Observation technologies, in order to provide intelligence on the location and volumetric quantification of surface water resources; complimented by water quality, precipitation and ground-water status indicators. This enables current and future water resource conditions to be determined, monitored and predicted within a single, integrated service.

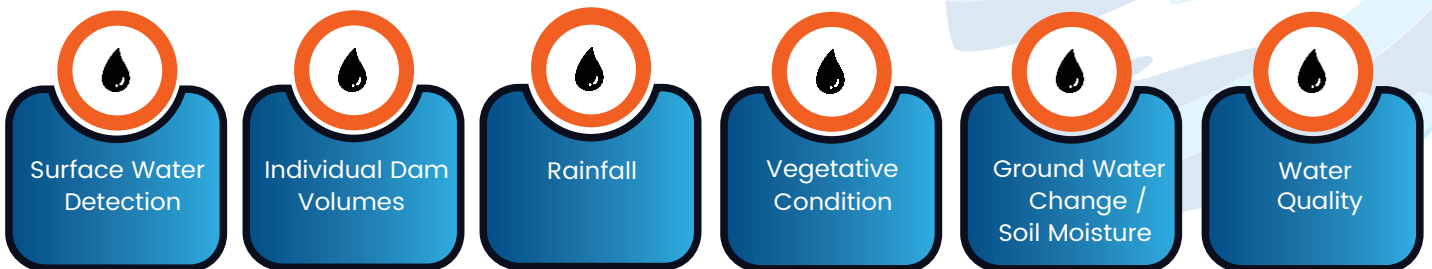
The service has been specifically designed as a highly scalable, globally applicable solution for rapid operational implementation. It is suitable for individual catchments, national coverage or trans-frontier basins. Users do not need to invest in any high-cost co-development of IT infrastructure, but only require web-connectivity to access service.

The service generates critical information on the unmonitored water resources, which provides vital intelligence to support the design and implementation of strategies for adaptation and mitigation to hydro-climatic extreme events, including heat waves, droughts and floods from source to sea.

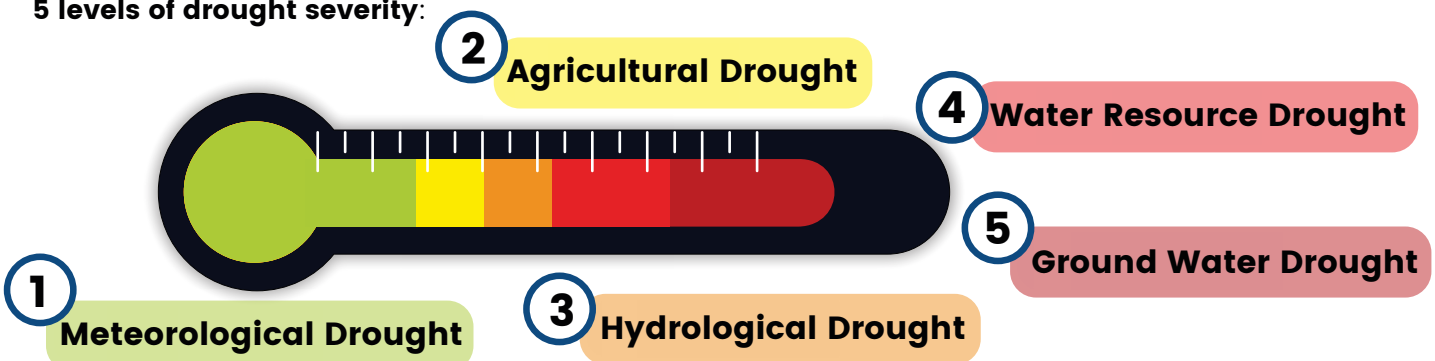


Monthly support tools from WaterSphere360:

Collectively or individually these products provide need-appropriate information for both planning (i.e., long-term) and operations (i.e., short-term) levels of management.



The **WaterSphere360** platform also includes current and predictive drought risk indicators based on **5 levels of drought severity**:



Supporting Long-term planning:

- Monitoring vegetation changes due to drought, overgrazing, and lowering of groundwater table
- Monitoring changes in key water quality indicators in specific reservoirs, to understand spatial and temporal trends.
- Determining which dams might represent a dam safety hazard and require inspected or control on a regular basis
- Quantifying the volume of water resources available in a particular area
- Identifying which dam resources should be registered and controlled
- Demarcation of flooding servitudes due to frequent inundation
- Providing an overview of rainfall trends in a particular area
- Separation of natural versus man made water bodies
- Providing rainfall data for runoff models
- Reviewing of sediment profiling
- Delimitation of wetlands

Supporting Short-term planning:

- Supporting operational decisions related to water restriction at low dam levels
- Assisting operational decision associated with dam safety at high water levels
- Detecting eutrophication problems and aquatic vegetation infestations in reservoirs
- Location specific monitoring of drought development and progress
- Supporting hydro power and flood release decisions
- Monitoring high rainfall events for flood prediction
- Policing of illegal water use and storage
- Detecting groundwater deficits

Additional WaterShpere360 Information:

The software as a service (SaaS) is built on proven operational capabilities with a successful track record in Southern Africa, including national governments, international organizations, transboundary water authorities, Not-for-profits, as well as private institutions, accessing the platform through a public information service.

Monthly service will provide you with the following information products:

- Web-based dashboard reporting & data access / logins.
- Comprehensive spreadsheet data records & geospatial (GIS) data coverages.
- Regular monthly updates from the project inception date.
- Retrospective monthly histories are provided at project inception.
- Surface water location, dam water volumes, rainfall, vegetation condition, ground water & water quality intelligence.

Why not explore how **WaterShpere360 can be used to assist you in supporting your stakeholders by contacting us for a demonstration?**

Contact Us :



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