SUSTAINABLE MANAGEMENT OF WATER RESOURCE: MONITORING AND TREATMENTS

Innovations and Benefits - Evaluation of the environmental quality of aquatic ecosystems. Control and management of environmental factors of biotic and abiotic stress. Technological solutions characterized by simplicity in plant engineering and management, suitable for small communities, developing countries and protected areas. Innovative technologies for water treatment.

Use - Diagnostics and monitoring of aquatic environments, integration with wetlands treatments. Implementation of analytical techniques for characterization and determination of organic and inorganic pollutants. Support to regional services in the territory for prevention and emergency response measures, related intervention plans, territorial planning of water resources.

Applications and ongoing Activities - Evaluation of the chemical-physical-biological characteristics of aquatic environments in relation to the Directive 2000 / 60CE, of chlorophyll and photosynthetic pigments, of the optical properties of the chromophoric portions of dissolved and particulate organic materials with spectroscopic techniques. Application of biological methods for the assessment of water quality and application of indices. Eco-toxicology: development and application of methods for the evaluation of toxic effects of contaminants; use of biomarkers, biochemicals, metabolic and cellular. Development of chemical-physical processes for drinking water treatment and wastewater treatment. Integrated management of water resources. Several treatment plants realized and currently monitored, studies related to the use of natural wetlands as tertiary in order to limit the phenomenon of burial and propagation of the salt wedge. Innovative integrated systems for the treatment of "first rain" water were designed to requalify the environment by recreating wetlands able to accommodate directive species.





Characteristics: CUSTOM

CUSTOM Thanks to its flexibility, the service can be adapted to specific needs and contexts

