

1. Record Nr.	UNINA9910830670903321
Titolo	Hydrological and limnological aspects of lake monitoring [[electronic resource] /] / edited by Pertti Heinonen, Giuliano Ziglio, Andre van der Beken
Pubbl/distr/stampa	Chichester ; ; New York, : Wiley, c2000
ISBN	1-282-34547-8 9786612345470 0-470-51112-5 0-470-51113-3
Descrizione fisica	1 online resource (400 p.)
Collana	Water quality measurements series
Altri autori (Persone)	HeinonenPertti ZiglioG BekenAndre van der
Disciplina	363.739463 551.482
Soggetti	Lakes Lakes - Models Hydrologic models Lake ecology - Models Water quality - Measurement
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Hydrological and Limnological Aspects of Lake Monitoring; Contents; List of Contributors; Series Preface; The Series Editor - Philippe Quevauviller; Preface; 1. ABIOTIC PROCESSES IN LAKES; 1.1 Hydrology of Lakes; 1.2 Hydrological Forecasting and Real-Time Monitoring: The Watershed Simulation and Forecasting System (WSFS); 1.3 Fluxes of Water and Materials into Lakes via Groundwater; 1.4 Nitrogen Leaching from Forested Soils into Watercourses; 1.5 Chemical Variables in Lake Monitoring; 2. BIOCOENOSIS IN EVALUATION OF THE ECOLOGICAL STATE OF THE LAKE 2.1 Phytoplankton in Water Quality Assessment - An Indicator Concept 2.2 Toxic Cyanobacteria; 2.3 Use of Littoral Algae in Lake

Monitoring; 2.4 Use and Applicability of Zoobenthic Communities in Lake Monitoring; 2.5 Botanical Aspects of Lake Monitoring and Assessment; 2.6 Fish as Components of the Lake Ecosystems; 2.7 Monitoring of Faecal Pollution in Finnish Surface Waters; 3. HARMFUL SUBSTANCES IN THE LAKE ENVIRONMENT; 3.1 Lake Sediments in Historical Monitoring of the Environment.; 3.2 Case Examples of Palaeolimnological Records of Lake Ecosystem Changes 3.3 Organochlorine Compounds in Finnish Freshwaters 3.4 Fate of Organic Xenobiotics in Sediments: Bioavailability and Toxicity; 3.5 Mercury: A Challenge for Lake Monitoring.; 4. NEW APPROACHES IN LAKE MONITORING; 4.1 Integration of Different Approaches in Lake Monitoring; 4.2 Design of the Freshwater Monitoring Network for the EEA Network; 4.3 Remote Sensing as a Tool for Monitoring Lake Water Quality; 4.4 Principles of Monitoring the Acidification of Lakes.; 5 QUALITY ASSESSMENT; 5.1 Quality Assurance for Water Analysis 5.2 Performance Characteristics of Microbiological Water Analysis Methods 5.3 Standardization of Water Analysis within the CEN and ISO: The Example of Water Microbiology; 6 THE MANAGEMENT OF MONITORING RESULTS; 6.1 Methods for Extracting Information from Analytical Measurements; 6.2 Water Quality Modelling of Lakes; 6.3 The Water Quality Classification System in Sweden; 6.4 Classification of the Environmental Quality of Freshwater in Norway; 6.5 Water Quality Classification in Finland; 6.6 Use and Impact of Monitoring Results for Water Protection Management; Index

Sommario/riassunto

Provides an extensive overview of all the most important aspects of lake monitoring studies describing methods of water sampling, analytical determination and data interpretation. Now that all EC countries must receive the EC Directive on Water Quality, there is a greater need to improve the quality of measurements, both in chemical and biological fields and this book describes the best practices in measuring water, quality, standard procedures and quality assurance in relation to current legislation and guidelines. The book provides coverage of: Abiotic processes and ha
