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Autore	Xu Meng
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Soggetti	Sustainable development Environmental management Aquatic ecology Water pollution Sustainable Development Water Policy/Water Governance/Water Management Freshwater & Marine Ecology Waste Water Technology / Water Pollution Control / Water Management / Aquatic Pollution
Lingua di pubblicazione	Inglese
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- PART I: Virtual Water and Water Footprint Accounting -- The Concepts of Virtual Water and Water Footprint -- Water Footprint Accounting Method -- PART II: Evaluation of Water Stresses Based on WFs -- Studies on the Evaluation of Water Footprints at Various Regional Scales -- Principal Water Stress Analysis Indexes and Approaches Based on WFs -- PART III: Study Cases: Water Stress Evaluation Under Multiple Regional Scales -- Study Cases: Water Stresses Evaluation at the Provincial Scale —the Zhejiang Province Case Study -- Study Case: Evaluation of Water Stresses at the River Basin Scale — the Haihe River Basin Case Study -- Case Study: Evaluation of Water Stresses at the City Scale —Dalian -- Comparisons of the Major Indexes on Water Stresses Analysis under Multiple Regional Scales -- PART IV: Water Footprint Accounting Application in Water Management Strategies -- Influencing Factors Analysis of Water Footprint Based on Extended STIRPAT Model -- Optimal Water Utilization and Allocation

Sommario/riassunto

Based on the water footprint (WF) concept, this book reviews WF-based water stress evaluation methods at the city, provincial and river basin levels respectively. In addition, it explores the factors that influence regional water footprint in the spatial sequence via the extended STIRPAT model. Highlighting the utilization of WF accounting in sustainable water management, one of the book's goals is to establish the optimization model of water allocation in various industrial sectors. Based on WF accounting, which thoroughly considers the water input for production, the relevant intermediate water inputs, and the water amount for wastewater discharge dilutions, the book provides a wealth of insights for scholars and practitioners with an interest in water resources and environmental management. In addition, it exhibits a scientific plan for regional water resource utilization and allocation, helping relieve regional water shortages.

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