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Nota di contenuto	Chapter 1 Introduction: Paradigm Shift in Producing Potable Water -- Chapter 2 Rainwater Harvesting for Potable Water Supply: Opportunities and Challenges -- Chapter 3 Evaluating Potable Rainwater Harvesting System Design and Regulations -- Chapter 4 Urban Stormwater Runoff for Potable Use: Potential and Challenges -- Chapter 5 Potable Reuse: A Pathway for Success and Sustainability -- Chapter 6 Innovative Approach to Building-Scale Wastewater Reuse -- Chapter 7 Producing Potable Water from Saline Waters: Concept, Technologies & Challenges -- Chapter 8 Integrating renewable energy sources into desalination

process to produce potable water: Technological Innovations -- Chapter 9 Producing Atmospheric Potable Water: An Overview.

Sommario/riassunto

This book reviews alternative water sources for producing potable water, and offers a comprehensive overview of the latest research and technologies. Edited by experts at the forefront of water resource management, the book presents a paradigm shift in the quest for sustainable and efficient methods of producing potable water. The book commences with a perspective on the changing landscape in potable water production, setting the stage for a comprehensive analysis of cutting-edge techniques. Subsequent chapters offer a critical evaluation of potable rainwater harvesting system design and regulations and discuss the potential of utilizing urban runoff as a viable source for drinking water, highlighting both the possibilities and challenges that come with this approach. In this book, readers will also learn more about the sustainable reuse of wastewater, exploring innovative approaches on both building and city scales, and the complexities of producing potable water from saline waters. Particular attention is given to the latest advances in integrating renewable energy sources into the desalination process to produce potable water. In the final chapter of the book, readers will find an overview of the latest atmospheric water harvesting technologies, and an insightful discussion of the process, performance, energy efficiency, feasibility, and limitations of each. Given its breadth, this book is an important account for researchers, graduate-level students, and policymakers. It also serves as a roadmap for water resource engineers and planners tackling water scarcity and diverse water resources portfolios.