1. Record Nr. UNINA9910337894003321 Autore du Plessis Anja Titolo Water as an Inescapable Risk: Current Global Water Availability, Quality and Risks with a Specific Focus on South Africa / / by Anja du Plessis Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2019 **ISBN** 3-030-03186-1 Edizione [1st edition 2019.] Descrizione fisica 1 online resource (xxi, 299 pages) Collana Springer Water, , 2364-6934 Disciplina 363.610968 Soggetti Environmental sciences Water quality Water pollution **Environmental management Environmental Science and Engineering** Water Quality/Water Pollution Water Policy/Water Governance/Water Management Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Part 1: Water as a Global Risk -- Ch.1 Current and Future Water Availability -- Ch.2 Current and Future Water Scarcity and Stress -- Ch. 3 Climate Change: Current Drivers, Observations and Impacts on the Globe's Natural and Human Systems -- Ch.4 Climate Change and Freshwater Resources: Current Observations, Impacts, Vulnerabilities and Future Risks -- Ch.5 Primary Water Quality Challenges, Contaminants and the World's Dirtiest Places -- Ch.6 Water as a Source of Conflict and Global Risk -- Part 2: Water as a Regional and National Risk -- Ch.7 Evaluation of southern and South Africa's Freshwater Resources -- Ch.8 Establishing South Africa's Current Water Quality Risk Areas -- Ch.9 Current Water Quality Risk Areas for Limpopo. Olifants and the Inkomati-Usuthu WMAs.-Ch.10 Current Water Quality Risk Areas for Vaal, Pongola-Mtamvuna and Orange WMAs -- Ch.11 Current Water Quality Risk Areas for Berg-Olifants, Breede-Gouritz and

Mzimvubu-Tsitsikamma WMAs -- Ch.12 South Africa's Water Reality:

Challenges, Solutions, Actions and a Way Forward.

Sommario/riassunto

The book presents an interdisciplinary systematic evaluation of increasing water stress and scarcity over the globe and specifically South Africa. South Africa is used as the prime example as the country is experiencing similar water challenges in terms of availability and quality as most regions across the globe. Water availability is predominantly used to illustrate water scarcity however, continued degradation of the world's freshwater resources, by a multitude of natural and anthropogenic factors, have consequently exacerbated water stress and scarcity due to it being of insufficient quality for various uses. The increase of water scarcity through both natural and anthropogenic factors has in turn led to water being viewed as an increasing risk within all spheres. Water as a source of conflict has come to the forefront especially within regions which struggle to meet the increasing demands from different water users and trying to achieve future sustainability of the resource. The increase of water scarcity and stress as well as the continued pressure of population and economic growth has brought various new challenges into play. This book focuses on water as an increasing risk over the globe and specifically South Africa by reviewing both water availability and quality, evaluating water as a global and national risk. The book concludes by focusing on current limitations, necessary strategic actions as well as possible policy-related changes which may be required to adapt to future water challenges and to lessen water as an increasing risk.