

1. Record Nr.	UNINA9910774700503321
Titolo	Integrated Transboundary Water-Climate Management Tools // edited by Nnenedi Anna Kgabi
Pubbl/distr/stampa	Cape Town, South Africa : , : AOSIS, , 2020
Descrizione fisica	1 online resource (xlvi, 224 pages) : colour illustrations, maps (chiefly colour)
Collana	Water security and climate adaptation in southern Africa
Disciplina	551.6
Soggetti	Climatic changes Water-supply - Management
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	A review of selected waterclimate studies conducted in Tanzania, Southern Africa -- Impact of climate change on water security in a semi-arid river basin -- Effective utilisation of the Africa Flood and Drought Monitor -- Water security and extreme precipitation indices of selected towns in Namibia -- Mixed strategy game models for generating baseline data on the water-air interactions -- Analysis of drought frequency and intensity using standard precipitation index -- Water demand and effects of climate change in the middle Kafue River basin -- The impact of surface-water demand for irrigation on water availability in Chongwe catchment -- Assessment of groundwater availability in a semi-arid river basin -- Postscript.
Sommario/riassunto	The scholarly theme of the book lends itself to the discipline of earth and atmospheric sciences, with a specific focus on water-climate studies. The book is a scholarly discourse by researchers in the natural sciences, including Hydrologists, Climate Scientists, Environmental Engineers and Water Scientists. The purpose of the book is to address the limited complementarity between the water and climate studies; which is crucial in promoting scientific research that informs policy decisions and implementation of water security plans. The chapters were selected to represent water-climate models and policy research conducted in different river basins in the arid and semi-arid environments. Therefore, the water-climate management tools

highlighted in this book include General Circulation Models (GCMs), Coupled Model Inter-comparison Project Phase 5 (CMIP5), Soil and Water Assessment Tool (SWAT), Africa Flood and Drought Monitor (AFDM), Extreme Precipitation Events (EPEs), R ClimDex, Mixed strategy game models, Standard Precipitation Indices (SPIs), Water Evaluation and Planning System (WEAP), Penman Calculator, and Saturated Volume Fluctuation (SVF).
