1. Record Nr. UNINA9910219980703321 Autore Groves David G **Titolo** Adapting to a changing Colorado River: making future water deliveries more reliable through robust management strategies [Place of publication not identified], : Rand, 2013 Pubbl/distr/stampa **ISBN** 0-8330-8481-X Soggetti Water resources development - Management - Colorado River Watershed (Colo.-Mexico) Water-supply - Colorado River Watershed (Colo.-Mexico) Climatic changes - Colorado River Watershed (Colo.-Mexico) **Business & Economics** Agricultural Economics North America Colorado River Watershed Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto Long-Term Water Planning and Management Under Uncertainty --Developing Robust Management Strategies for the Colorado River Basin -- Future Vulnerabilities to Colorado Basin Water Deliveries --Reducing Vulnerabilities Through New Management Options --Implementing a Robust, Adaptive Strategy for the Colorado River Basin -- Appendix A: Vulnerability Analysis Example and Additional Results -- Appendix B: Basin Study Options Included in the Portfolios. Sommario/riassunto "The U.S. Bureau of Reclamation and water management agencies representing the seven Colorado River Basin States initiated the Colorado River Basin Study in January 2010 to evaluate the resiliency of the Colorado River system over the next 50 years and compare different options for ensuring successful management of the river's resources. RAND was asked to join this Basin Study Team in January 2012 to help develop an analytic approach to identify key vulnerabilities in managing the Colorado River basin over the coming decades and to evaluate different options that could reduce this vulnerability. Using a quantitative approach for planning under

uncertainty called Robust Decision Making (RDM), the RAND team assisted the Basin Study by: identifying future vulnerable conditions that could lead to imbalances that could cause the basin to be unable to meet its water delivery objectives; developing a computer-based tool to define 'portfolios' of management options reflecting different strategies for reducing basin imbalances; evaluating these portfolios across thousands of future scenarios to determine how much they could improve basin outcomes; and analyzing the results from the system simulations to identify key tradeoffs among the portfolios. This report describes RAND's contribution to the Basin Study, focusing on the methodologies used to identify vulnerabilities for Upper Basin and Lower Basin water supply reliability and compare portfolios of options. The report provides a useful resource for other planners wishing to replicate or expand on the methodologies used for other studies"--Back cover.