1. Record Nr. UNINA9910820867103321 Autore Webb Robert H. **Titolo** Requiem for the Santa Cruz: an environmental history of an Arizona river / / Robert H. Webb, Julio L. Betancourt, R. Roy Johnson, and Raymond M. Turner; foreword by Bernard L. Fontana Pubbl/distr/stampa Tucson, Arizona:,: University of Arizona Press,, [2014] ©2014 **ISBN** 0-8165-4750-5 Edizione [1st ed.] Descrizione fisica 1 online resource (297 pages) Classificazione NAT010000 Disciplina 577.640979179 Soggetti Natural history - Santa Cruz River (Ariz. and Mexico) Stream ecology - Santa Cruz River (Ariz. and Mexico) Santa Cruz River (Ariz. and Mexico) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. List of illustrations -- Foreword / by Bernard L. Fontana -- Preface and Nota di contenuto acknowledgments -- 1. The problem of riverine change -- 2. Characteristics of a desert river -- 3. Causes of arroyo downcutting --4. Perennial flow and discontinuous arroyos, 1691-1872 -- 5. Land use, climate, and floods, 1873-1888 -- 6. Arrovo downcutting and widening, 1889-1915 -- 7. Water development and the Great Mesquite Forest, 1916-1942 -- 8. The city and the arroyo, 1943-1975 -- 9. Arroyo management in the time of floods, 1976-1995 -- 10. Channel filling and river restoration efforts, 1996-2012 -- 11. Summary of the past and some possible futures -- Appendixes -- Notes -- References -- Index. "Requiem for the Santa Cruz is the natural history of the life and death Sommario/riassunto of a Southwestern river. The book is a model for explaining changes in river systems and the consequences"--"Over the millennia, the drainageway we now call the Santa Cruz River has seen many ebbs, flows, and floods. Throughout its long history, the river has meandered. It has flowed on the surface. It has carved deep fissures, and it has widened and narrowed. As readers of Requiem for

the Santa Cruz learn, these are events that also have taken place in

historic times. Authored by an esteemed group of scientists, Requiem for the Santa Cruz thoroughly documents this river, which flows through Tucson, Arizona, as a prime example of arroyo cutting, a process where heavy rains cut down through rock to create deep channeling. Each chapter provides a unique opportunity to chronicle the arroyo legacy, evaluate its causes, and consider its aftermath. Using more than a century of observations and collections, the authors reconstruct the physical, biological, and cultural circumstances of the river's entrenchment, widening, and subsequent partial filling. Today, communities everywhere face this conundrum: do we manage ephemeral rivers through urban areas for flood control, or do we attempt to restore them to some previous state of naturalness? Requiem for the Santa Cruz carefully explores the channel-change legacy, the efficacy of attempts to stabilize it, and the nascent attempts at river restoration to give a long-term perspective on management of rivers in arid lands. Tied together by authors who have committed their life's work to the study of arid-land rivers, this book offers a touching and scientifically grounded requiem for the Santa Cruz and every southwestern river"--