Record Nr. UNINA9910711639103321 Titolo Riparian research and management: past, present, future Fort Collins, CO: .: United States Department of Agriculture, Forest Pubbl/distr/stampa Service, Rocky Mountain Research Station, , 2018-2020 Descrizione fisica 1 online resource (2 volumes): illustrations (some color), maps (some color) Collana General technical report RMRS; GTR-377, GTR-411 Soggetti Riparian areas - United States - Management Riparian ecology - United States Riparian forests - United States Riparian animals - United States Riparian plants - United States Watershed management - United States Riparian animals Riparian areas - Management Riparian ecology Riparian forests Riparian plants Watershed management Technical reports. **United States** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Technical editors of volume 1: R. Roy Johnson, Steven W. Carothers, Deborah M. Finch, Kenneth J. Kingsley, John T. Stanley. Technical editors of volume 2: Steven W. Carothers, R. Roy Johnson, Deborah M. Finch, Kenneth J. Kingsley, Robert H. Hamre. "November 2018"--Volume 1. "June 2020"--Volume 2. Nota di bibliografia Includes bibliographical references. Nota di contenuto Volume 1: Development of the science of riparian ecology in the semiarid western United States -- Development of riparian perspectives in

the wet Pacific Northwest since the 1970s -- Impacts of interacting fire,

climate, and hydrologic changes on riparian forest ecosystems in the Southwest -- Invasion and restoration of western rivers dominated by Tamarix spp. -- Unintended consequences: tamarisk control and increasing threats to the southwestern willow flycatcher -- Beavers, livestock, and riparian synergies: bringing small mammals into the picture -- Euro-American beaver trapping and its long-term impact on drainage network form and function, water abundance, delivery, and system stability -- Arizona as a watershed: then and now: case studies of changed management of rivers and habitat in the lower Colorado River system -- Evaluating riparian vegetation change in canyon-bound reaches of the Colorado River using spatially extensive matched photo sets -- Breeding waterbirds of the Mexican portion of the Colorado River delta -- Terrestrial vertebrates of mesquite bosques in southwestern North America -- Appendix A: Western pioneers of riparian study through the 1980s -- Appendix B: Conferences. symposia, and other gatherings pertaining to riparian ecosystems. riparian ecology, riparian habitat restoration, and riparian area conservation.

Volume 2: Understanding gains and losses of riparian habitat: interpreting change, its causes and consequences -- A naturalized riparian ecosystem: consequences of tamarisk leaf beetle (Diorhabda spp.) biocontrol -- Vanishing riparian mesquite bosques: their uniqueness and recovery potential -- Using the Southwest Experimental Garden Array to enhance riparian restoration in response to global environmental change: identifying and deploying genotypes and populations for current and future environments -- The Watershed continuum: a conceptual model of fluvial-riparian ecosystems -- It's not all bad news: riparian areas in the Anthropocene -- The development of riparian ecosystem restoration in California -- Sacramento-San Joaquin System -- Recreation habitat versus ecological habitat in riparian areas: can we manage for both? -- Intended versus unintended effects during riparian restoration create high quality recreation habitat.

Sommario/riassunto

In the past fifty years, riparian values have been recognized and documented, and the science of riparian ecology developed steadily. Volume 1 covers the more mesic northwestern United States to the arid Southwest and Mexico. The authors review the origins of riparian science in the western United States, document what is currently known about riparian ecosystems, and project future needs. Topics include: interactions with fire, climate change, and declining water; effects from exotic species; unintended consequences of biological control; the role of small mammals; watershed response to beavers; watershed and riparian changes; changes below large dams; water birds of the Colorado River Delta; and terrestrial vertebrates of mesquite bosques. Appendices and references chronicle the field's literature, authors, "riparian pioneers," and conferences.

Volume 2 expands upon two important recent developments: global climate change and impacts of introduced tamarisk leaf beetles (Diorhabda spp.) in the American West. It also covers the losses of riparian habitat, including extirpation of a large number of mesquite bosques (woodlands) in the Southwest; the restoration of riparian ecosystems damaged by anthropogenic activities; the importance of a watershed; and the importance of riparian ecosystems to recreation. The combination of volumes 1 and 2 examines the evolving understanding of scientific implications and anthropogenic threats to those ecosystems since Caucasian settlement of the region to present.