

Foreword

As this River Books series volume went to press, continuing change in the Earth's climate was increasingly apparent, and the most disturbing manifestation of that change has been widespread, deepening, and damaging drought.

Nevertheless, for the most part, the taps have continued to flow in our kitchens and our toilets have continued to flush, masking the severe underlying threat posed by lack of rainfall to both our economy here in Texas and our environment. During the drought of the 1950s, which we have traditionally considered as bad as drought can get, most Texans lived on farms and ranches or in small towns dependent on agriculture. Today, we are an overwhelmingly urban society and substantially removed from the direct impact of severe drought on our natural systems and on the rural landscape, the source of both our food supply and our fish and wildlife habitat.

Against this backdrop, the study of water and aquatic science is essential for engagement in an increasingly changing and challenging world. *Texas Aquatic Science* is not only timely, it is the most comprehensive text ever written for the state's middle and high school students on these subjects. Additionally, it is the state's first water and aquatic science text to integrate a traditional book with electronic technology. The ebook is readily available, and a comprehensive companion website is at <http://texasaquaticscience.org/>. There is an accompanying extensive and comprehensive teacher's guide, which can also be accessed through the website and at <http://www.tpwd.texas.gov/publications/learning/aquaticscience/>. Introductory videos have been produced for each chapter and parts of the project can be found on educational websites, including iTunes U and YouTube Education.

The author of *Texas Aquatic Science*, Rudolph Rosen, is a distinguished scientist, conservationist, and aquatic policymaker. While presenting visual images and other content from Texas, he has provided an indispensable guide that is applicable throughout North America because the Lone Star State contains both northern and southern components of the continent's aquatic systems, from headwaters to oceans.

Texas Aquatic Science is thus an invaluable tool for preparing the next generation of citizens and leaders to confront the most serious natural resource challenge of their time. It would not have been possible without a generous grant from the Ewing Halsell Foundation, matched with funding from the Wallop-Breaux Federal Aid in Sport Fish Restoration Act. Financing from both philanthropy and government enabled a unique partnership of The Meadows Center for Water and the Environment at Texas State Univer-

sity, the Harte Research Institute for Gulf of Mexico Studies at Texas A&M University-Corpus Christi, the Texas Parks and Wildlife Department, and Texas A&M University Press to produce this important work. We want to thank the Missouri Department of Conservation whose curriculum served as an excellent model and whose contribution has been invaluable.

Finally, all science teachers in Texas were invited to provide content for *Texas Aquatic Science* and to review each chapter as it was written. We are very grateful to them for their comments and contributions to advance their students who will be informed and inspired by these pages.

—Andrew Sansom, General Editor