

Preface

OVER 7 BILLION PEOPLE now inhabit the earth, placing unprecedented pressure on the planet's soils, waters, forests, and other natural capital. The majority of the global population lives in urban areas, where their interactions with nature, and the benefits that these interactions provide, commonly occur in small-scale sites and residential settings. Most often, these landscapes are treated as inconsequential, and their full potential to mend humanity's environmental offenses and improve our quality of life is commonly overlooked. This book was written to address this issue and to assist projects in gaining the full environmental, economic, and social benefits that can be achieved when sites protect and restore ecosystem services. It seeks to elevate the discussion of sustainability beyond "doing less bad"—attempting to merely slow down environmental degradation—to create regenerative sites that restore ecosystem function and rebuild the earth's natural capital.

This book explores major environmental and human health issues, such as air and water pollution, habitat loss, water shortages, and flooding, which often plague urban environments, as well as the potential for site development and maintenance to either contribute to these problems or to be part of the solution. Sustainable strategies that address each challenge include detailed descriptions, design considerations, and illustrations to help project teams determine the best options for their site. Throughout, the book emphasizes the interconnectivity of all project components and helps designers integrate living and built systems into mutually beneficial and cohesive design solutions. Integrated design is stressed as a model for improving site performance and saving time and money over the life of the project.

All sites—whether densely urban, suburban, or rural—can support the natural systems and processes that sustain and fulfill our lives. Throughout the book, numerous case studies from public and private projects in the United States and abroad are provided to illustrate a diversity of sustainable design strategies. These projects demonstrate that sustainability happens, not in spite of but in response to challenges. As with all projects, the design teams for the case studies faced outside influences, budget limitations, and other restrictions, but through focused effort, creativity, and collaboration, they were able to create sustainable solutions. In many cases, these projects are more cost effective and provide a broader suite of ecosystem services than similar conventional landscape developments. It is my hope that the case studies will motivate the design and landscape industries to continue raising the bar and striving toward true sustainability.