

### **Advance Praise for *reWealth!***

“This is the book the Presidential candidates should be talking about! In *reWealth!* they will find the path to revitalizing our economy, restoring our environment, and renewing the quality of our lives. For all the talk of change in this Presidential cycle, the candidates have all missed the economic sea change that Storm Cunningham has found and revealed in *reWealth!*”

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“Storm Cunningham's new book, *reWealth!*, is sure to be well purchased and widely read . . . especially here in Ontario, where he has gained such a solid reputation.”

—**Wayne A. Dawson**, Vice President, Ontario Region, Cement Association of Canada

“Cutting-edge academic programs in business, engineering, planning, environment, and public policy must put *reWealth!* on their required reading lists! *Rewealth* is our future, and a surprisingly large part of our present. This book is a powerful revelation and an action strategy for students, faculty, and working professionals alike.”

—**William Humber**, Director, Centre for the Built Environment, Seneca College, Toronto, Ontario

“Compelling, urgent, and full of opportunity . . . anybody who has an interest in business and/or the environment will want this book. It would take a complete fool to put it back on the bookstore shelf.”

—**Todd Latham**, publisher, *ReNew Canada* magazine

“Thought-provoking, insightful, and hopeful. In an age of climate change, destructive development, and species extinction, *reWealth!* points to us to a new paradigm of restoration and replenishment. *ReWealth!* is a fundamental rethinking of our economic models and the way we grow our cities. Sustainability is but a step along the path towards restoration; Cunningham does a fantastic job of illuminating this new path to global renewal.”

—**Barry Patterson**, Biomimicry Guild

“Storm’s vision is extremely important for us and for the next generations. Everyone who cares about our globe has to listen to him. This can make a difference!”

—**Amos Brandeis**, ([www.RestorationPlanning.com](http://www.RestorationPlanning.com)) Architect and Urban & Regional Planner, Vice Chairman of the Israel Planners' Association.

“A visionary in restoring communities and natural resources.”

—**Grant Davis**, Executive Director, Bay Institute, San Francisco, California

“I was most impressed by Storm’s original book, but his new message appears even more powerful and well-crafted. He’s talking about a simple, practical approach to reversing some of our most intractable economic, environmental, and social problems.”

—**Dr. Mohan K. Wali** of the Ohio State University (OSU), Professor of Ecology and Environmental Science; Director, Environmental Science Graduate Program, School of Natural Resources; Professor at OSU’s John Glenn School of Public Affairs.

“Revitalization guru Storm Cunningham’s new book contains your future. *ReWealth!* offers construction industry practitioners an edge as the world economy moves into uncertain times. I was hooked by the time I’d finished the introduction.”

—**Will (Korky) Koroluk**, Construction Columnist, *Daily Commercial News*.

# ***re*Wealth!**

**Stake Your Claim in the \$2 Trillion *re*Development  
Trend That's Renewing the World**

**storm cunningham**



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To Scott Cunningham (1960–2003).  
The world is immensely poorer without you.

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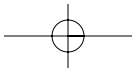
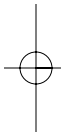
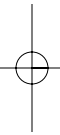
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# Foreword

## **The Impact of *The Restoration Economy* on the World**

*Much has changed in the six years since publication of the first book to document the global renewal trend.*

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As the first book on the fast-growing global trend toward redevelopment and renewal, *The Restoration Economy* introduced the world to the huge, multifaceted restorative industries, and was the first book to encompass restoration of both our built and natural environments.

*The Restoration Economy* documented the various crises, disciplines, and industries underlying the vast global trend toward renewal. It focused on the bits and pieces, in other words: restoration of ecosystems, historic buildings, brownfields, and so on. The present book is about comprehensive solutions . . . how do you put all those forms of asset renewal together to create that magical, emergent thing we call “revitalization”?

*The Restoration Economy* made two significant contributions to helping community builders better perceive, organize, and harness the emerging power of restorative development. The first was in the area of terminology: it documented, for the first time, the rise of a trillion-dollar global industry that restores our natural and built assets, and provided it with some much-needed vocabulary, such as “restorative development,” “integrated restoration,” “restoration economy,” and more. Additional new terminology, such as “restorable asset” and “renewal engine” is introduced here in this book.

The second contribution was in the area of taxonomy. A taxonomy is simply a system for classifying or organizing things, such as the species-genus-family-order taxonomy used by evolutionary biologists. *The Restoration Economy* made the first attempt to organize and categorize this enormously economic, technical, and scientific sector. It identified the following:

- Three global crises—contamination, corrosion, and constraint—were identified as the catalysts of the trend toward restorative development.
- Eight sectors of restorative activities—ecosystem, watershed, fishery, agricultural, brownfield, infrastructure, heritage, and catastrophe damage—were

shown to have been born (or had grown dramatically) in response to those three crises.

- Three modes of economic development were documented. This “trimodal development perspective” helped readers realize that all of this renewal, redevelopment, restoration, and renovation is not just a new growth market; it is a basic mode of development, largely invisible to our economic reporting systems. The book suggested that we need to adopt the trimodal perspective into our planning, budgeting, and policymaking if we wish to retard destructive development and accelerate restorative development. Those three modes are:
  - a. New development (aka: “destructive development,” “pioneer mode,” or “sprawl”) is the beginning of the development lifecycle.
  - b. Maintenance/conservation is the middle of the lifecycle (“maintenance” is conservation of the built environment, whereas “conservation” is maintenance of the natural environment.)
  - c. Restorative development is the end and new beginning of the lifecycle.

### **What Has Changed Since *The Restoration Economy* Was Published**

Over six years have passed since *The Restoration Economy*'s manuscript was finalized. The basic premise of the book, along with its contributions to terminology and taxonomy, has been accepted without significant challenge in the worlds of business, nonprofits, government, and even academia.

Prior to publication of *The Restoration Economy*, city councils or government bodies of any kind could not sit around the table making simple statements like “For the next 20 years, let’s put 20% of our money into new development (sprawl), 40% into maintenance of our built environment and conservation of our natural environment, and 40% into restorative development.” They could not make such statements because “restorative development” was missing from their vocabulary. The closest they could come was “capital improvement.”

*The Restoration Economy* helped catalyze a move toward greater integration of projects, people, and programs. We tend to define and separate ourselves by geography or by what we work on (farms, computers, highways) rather than by the net effect of our work (destructive, neutral, or restorative). *The Restoration Economy* linked all the restorers, no matter where they were or what they worked on.

*The Restoration Economy* documented in a single place virtually all types of restorative projects. Customarily, practitioners and researchers operate in specialized “silos,” largely unaware of the efforts of their counterparts. Heritage architects care about restoring historic buildings, biodiversity-related scientists care about restoring

ecosystems, infrastructure engineers care about restoring roads, bridges, sewers, or power grids, but few of them care much about the others' agendas. The same applies to those restoring agricultural lands, watersheds, fisheries, brownfields, and catastrophe damage. *The Restoration Economy* helped all of these restorative professionals to "look up and see each other" . . . to realize that they were all part of a vast, fast-growing, new global economic sector known as restorative development.

Cunningham's initial foray into the field of restorative development gave these many disciplines a shared vocabulary, a common taxonomy, and a theoretical basis for working together, which has helped accelerate a move toward more collaborative, multidisciplinary approaches. Many of them had long acknowledged a need for more integration, but lacked an effective context for advancing it. Community revitalization has become that context, because it only emerges when quality of life has been enhanced by restoring the natural, built, and socioeconomic environments.

Most communities do not track their restorable assets—brownfields, abandoned buildings, vacant lots, eroded/polluted streams, derelict infrastructure—much less have a program for coordinating their renewal. In fact, most communities still refer to them by their twentieth century name: "problems." As a result, many revitalization opportunities are lost.

Some communities *do* track their restorable assets, but renew them in a disjointed, project-by-project manner. The renewal momentum of each successful project is lost in this stop-start approach, as are many potential efficiencies and synergies. Each renewal project is designed and launched in relative isolation, lowering both its funding potential and the likelihood of its contributing maximally to a community's rebirth.

*The Restoration Economy* assisted communities, counties, states/provinces, and entire countries to realize that restoration, redevelopment, and revitalization comprise the majority of their economic future. They began to see the sprawl model of economic growth as a vestige of an earlier age. What was once necessary had morphed into a self-destructive behavior that created multiple new problems for each one it solved. As a result, restorative development is entering the lexicon and conversation at all levels of planning, budgeting, and reporting.

Another change catalyzed or accelerated by *The Restoration Economy* has been the emergence of curricula and degrees—at universities, colleges, and trade/technical schools—that arm technicians and professionals with the skills and knowledge needed to restore our natural resources and revitalize our communities (and to get hired by the companies and government agencies that are doing this work). But most higher education and technical training is still stuck in what this new Cunningham book refers to as "dewealth" mode: wealth creation that depletes and degrades our resource base.

For instance: civil engineering curricula related to waterways still focuses primarily on draining swamps, straightening rivers, and building dams, rather than on restoration, which requires a very different set of skills, hard to find in today's academic curricula. The time has come to start distinguishing restorative engineers (and other disciplines) from those who are still stuck in the mode of conquering nature. Just as budgets need to distinguish development from redevelopment, so too do our degrees. But where can a student go to get a Ph.D. in Watershed Restoration? Such courses and degrees are now being created.

Of course, *The Restoration Economy* was not responsible for the rapid, recent evolution of the “rewealth” sector—it simply was the first report on the subject—but the resulting public recognition probably accelerated the trend. The book helped industry, government, and society recognize what was happening, and facilitated talking about it across disciplines.

### **reWealth!**

This book is primarily about programs and strategies for revitalizing our communities and our planet. *The Restoration Economy* was primarily about the many varied types of projects and tactics such programs would involve. Consider:

- *The Restoration Economy* did not reveal exactly *how* communities brought themselves back from death's door via restorative development;
- *The Restoration Economy* did not address the revolutionizing effect the growth of restorative development is having on our economic systems;
- *The Restoration Economy* briefly mentioned—but did not offer many examples of—the renewal trend's impact on personal issues such as education, careers, investments, retirement, and lifestyles;
- *The Restoration Economy* did not deal much with social and cultural renewal, key goals of many revitalization programs;
- *The Restoration Economy* claimed that we need to integrate the renewal of our natural, built, and socioeconomic environments, but did not say how.

In other words, what *The Restoration Economy* did not cover could fill a book. And now it has. You're holding it. *reWealth!* addresses all of those crucially important subjects, and much more. Enjoy . . . and learn!

**William H. Hudnut III**  
Former four-term mayor of Indianapolis  
Senior Resident Fellow, Urban Land Institute

# Preface

## **The Impact of *The Restoration Economy* on My Life**

*Restoring the world for a living feels really good.*

---

The November 2002 publication of *The Restoration Economy* changed many things, including my profession.

In 1996, I set out to write a book on sustainable development. During the research, I noticed that the most exciting examples of sustainable development were actually restorative . . . they went beyond simply not damaging the Earth or its people, to repairing previous damage. I started looking for more forms of this “restorative development.”

I was surprised to find it everywhere I looked, in a quantity and diversity that was astonishing. By the time I finished the manuscript, restorative development had usurped the book; the larger-but-fuzzier concept of sustainable development had been relegated to half of one chapter, by that name, anyway. In truth, restorative development is the epitome of sustainable development. It’s the “sweet spot,” where “doing no damage” and “undoing earlier damage” meet.

The only nomenclature alteration I’ve made since 2002 was changing the “disaster/war” sector to “catastrophe.” In 2006, I expanded the eight sectors of natural and built restorable assets into the 12 sectors referenced in this book by adding a socioeconomic category of assets: education, commerce, social services/security, and culture. With that addition, all of the basic ingredients of community renewal were in place. What was still needed, however, was a reliable recipe for turning those ingredients into revitalization. That’s offered in *reWealth!* I call it the *resolution*.

On page 16 of *The Restoration Economy* (first hardcover edition), I stated “This book offers only brief flashes of the trend toward integration; this trend deserves its own book, and will get it.” *reWealth!* is that book, but integration has become far more vital than that neophyte author envisioned. Then, I was only talking about integration

of the eight project sectors, plus integration of metropolitan and rural renewal agendas. While I had perceived a trend toward increasing restorative development and decreasing destructive development, I hadn't yet perceived the underlying dewealth/rewealth socioeconomic shift. This historic transition affects virtually every aspect of our life today.

### **How *The Restoration Economy* Changed My Life, and Led to This Book**

During the six years I spent writing *The Restoration Economy*, I was an outsider to the world of restoration, redevelopment, and revitalization. I accidentally stumbled upon a trillion-dollar economic sector that had never before been reported on, and I wrote about it from the perspective of "Wow, look what I found!"

During that six-year period, I was director of strategic initiatives at the Construction Specifications Institute (CSI), a professional society of some 17,000 architects, engineers, specifiers, and construction industry product manufacturing representatives. In May of 2002, I left CSI and began designing my new career, using the upcoming (November 2002) publication of *The Restoration Economy* as a springboard.

Professional public speaking was the first step. Consulting gigs—ranging from entrepreneurs to Fortune 500 firms to federal agencies—started coming in shortly after that. But the major change came with the founding of the nonprofit Revitalization Institute. You'll read more about it in Chapter 14. The institute has just entered a major new growth phase as of the publication of this book, with me stepping down as Executive Director, and the institute moving from Washington, DC, to Toronto.

As a result of these activities, I've spent the past six years deeply immersed in restoration projects and revitalization programs all over the globe. In fact, I might be the only person on earth whose life for the past half-dozen years has been entirely focused on "re" activities in all their many flavors, and in all types of locations.

My professional life has been spent exclusively at conferences, classes, project meetings, and strategy sessions related to restoring fisheries, farms, watershed, and ecosystems . . . restoring brownfields, infrastructure, historic structures, and catastrophes . . . restoring educational systems, social services, cultural assets, and commercial activity. These activities have been in both rural communities and huge metropolises . . . in both industrialized and lesser-developed countries.

*Give a man a fish, and you'll feed him for a day.  
Teach a man to fish, and he'll buy a funny hat.  
Talk to a hungry man about fish, and you're a consultant.*

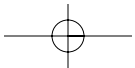
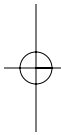
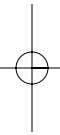
—Scott Adams

I haven't actually been "doing" any of it, of course. I've only been advising, analyzing, and connecting the people, projects, and organizations that really restore the world for a living. Their stories fill the pages of this book. The perspective I've gained from helping them revitalize their communities and regions spawned the insights in this book. I hope their stories inspire you to follow their lead, if you're not already restoring our world for a living.

You'll read stories of investors, educators, nonprofits, and businesses that are reinventing their strategies and their organizations. Each is a story of *rewealth*; wealth creation based on *replenishing* natural resources, *restoring* structures, *redeveloping* neighborhoods, and *revitalizing* cities. This is as opposed to the *dewealth* model that humanity has relied on for 5,000 years: wealth creation based on *depleting*, *developing*, *degrading*, and *destroying*.

The goal of this book is to help you, your organization, or your community make that shift from dewealth to rewealth, too. Whether through your profession or through your investments, you can start enjoying some of the \$2 trillion worth of rewealth generated annually worldwide. Two trillion dollars might sound like a lot of money, but the dewealth/rewealth shift has only just begun.

**Storm Cunningham**  
**Washington, D.C.**



# Acknowledgments

A list of the people who contributed to this book would likely take up an entire chapter's worth of space, so I'll have to focus on those whose influence was the greatest. Dr. Maria MacKnight, my lovely and loving wife, must come first. She supported me in every way possible, which included her restorative, classical Chinese medicine and her equally restorative classical feng shui (not to be confused with the commercialized, hyper-simplified "feng shui" usually practiced in the United States). Alma Cunningham, my lovely and loving mother, was the first to read and proof these words, and also supported me in more ways than can be told here. Andrew Cunningham, my not-quite-so-lovely but equally loving brother provided almost daily moral support. Dave Marcmann, my second-oldest friend, helped me through many of the inevitable crises of launching a new career. Bob Barton, my oldest friend, did likewise. The dynamic William Humber of Seneca College supported my work in many critically important ways. Jean Bilideau, former Director General of Environment Canada, helped me figure out how to present the renewal engine model, as did Aleks Janicijevic, who created the two excellent graphics you'll find in these pages.

Big thanks go to two additional reviewers of the original manuscript, who operated under a very tight deadline: David Rouse of the design and planning firm WRT Design, and Barry Patterson of the Biomimicry Guild.

Herb Schaffner of McGraw-Hill spotted the potential of the rewealth concept, and kept me focused on it whenever I started digressing. Herb is actually the publisher of McGraw-Hill Business, but he personally took on *reWealth!* as editor, due to his belief in its importance. I greatly appreciate the efforts of the McGraw-Hill team: Janice Race, Ed Chupak, Lauren Lynch, Seth Morris, Kenya Henderson, Anthony Landi, Heather Cooper, and Malvina D'Alterio. My sincere thanks also to Richard Rothschild of Print Matters, Inc. for making sure the project met its deadlines.

I'd like to pay tribute to the brilliant reef restoration research of German researcher Wolf Hilbertz, who died in 2007. An idyllic couple of weeks working with him under the waters of Negril, Jamaica in the early 1990s can be credited in part as a catalyst of my "re" orientation.

At that same time, I was working with a truly multidisciplinary “renaissance scientist,” Dr. Walter Adey. He was then Director of the Smithsonian Institution’s Marine Research Labs, and is now associate editor of *Restoration Ecology* magazine. He, too, was innovating coral reef restoration technologies back before most folks considered such a thing even remotely possible. These two pioneers were my earliest link to the wonders of restoring the world for a living.

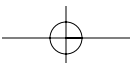
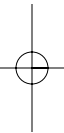
Finally, my thanks go to Bill Hudnut for graciously consenting to write the Foreword. Bill is one of the most universally admired authorities on the subject of community renewal, so I’m enormously fortunate to have his name associated with this work.

# List of Acronyms

ACBA, American College of Building Arts  
AdT, Aguas del Tunari  
AEC, architectural, engineering, construction  
AFP, alternative finance and procurement  
AIA, American Institute of Architects  
APA, American Planning Association  
ApT, Agua para Todos (Water for All)  
ART, artificial reproductive technologies  
ASLA, American Institute of Landscape Architects  
ASSET, Africa's Search for Sound Economic Development  
B2B, business-to-business  
BBO, buy-build-operate  
BDO, build/develop/operate  
BOO, build-own-operate  
BOT, build/operate/transfer  
BRAC, Base Realignment and Closure  
BTO, build/transfer/operate  
Cal-Am, California American Water  
CALFED Bay-Delta Program  
Caltrans, California Department of Transportation  
CCPPP, Canadian Council for Public-Private Partnerships  
CDC, City Development Company  
CDC, community development corporation  
CDP, Chattanooga Downtown Partnership  
CNRS, Centre National de la Recherche Scientifique  
CPO, compulsory purchase order  
CRA, Community Reinvestment Act  
CSG, Cherokee Sanford Group  
CSI, Construction Specifications Institute  
DB, design-build  
DBM, design-build-maintain

DBO, design-build-operate  
 EMS, Environmental Management System  
 EP, English Partnerships  
 EPA, Environmental Protection Agency  
 EPIC, European Property Italian Conference  
 EU, European Union  
 EUL, enhanced use leasing  
 FLOW, Friends of Locally Owned Water  
 GIPC, Greater Indianapolis Progress Committee  
 HUD, Department of Housing and Urban Development  
 ICSID, International Centre for Settlement of Investment Disputes  
 IMF, International Monetary Fund  
 IRB, Infrastructure Renewal Bond  
 IUCN, International Union for the Conservation of Nature  
 IVF, in vitro fertilization  
 LAEGC, Lewiston-Auburn Economic Growth Council  
 LDO, lease/develop/operate  
 LEED, Leadership in Energy and Environmental Design  
 LISC, Local Initiatives Support Corporation  
 MBG, Missouri Botanical Garden  
 MBTF, Moccasin Bend Task Force  
 MMP, Misicuni Multipurpose Project  
 NAR, neighborhood annihilation roads  
 NAWCA, North American Wetlands Conservation Act of 1989  
 NCPPP, National Council on Public-Private Partnerships  
 NGO, nongovernmental organization  
 NOAA, National Oceanic and Atmospheric Administration  
 NoMa, North of Massachusetts Avenue  
 NRDC, National Development and Reform Commission (of China)  
 OAA, Ontario Association of Architects  
 OIP, Ontario Infrastructure Projects Corporation  
 OSIFA, Ontario Strategic Infrastructure Financing Authority  
 P3, public-private partnerships  
 PES, payments for ecosystem services  
 PFI, private finance initiative  
 PG&E, Pacific Gas & Electric Company

PIR, (Ontario Ministry of) Public Infrastructure Renewal  
PPP, public-private partnerships (older version)  
QMM, QIT Madagascar Minerals  
QoL, quality of life  
R3, rapid, resilient renewal  
RFP, request for proposal  
RFQs, request for qualifications  
RNC, Restoring Natural Capital (Alliance)  
ROI, return on investment  
SEED, Supporting Entrepreneurs in Environment and Development  
SEMAPA, Servicio Municipal de Agua Potable y Alcantarillado  
SPV, special purpose vehicle  
SWOT, strengths, weaknesses, opportunities, and threats (analysis)  
TIF, tax increment financing  
TPL, Trust for Public Land  
TVA, Tennessee Valley Authority  
UN, United Nations  
UNC, University of North Carolina  
UNCC, United Nations Compensation Commission  
UNDP, United Nations Development Program  
UNEP, United Nations Environment Programme  
URC, Urban Regeneration Company  
USAID, U.S. Agency for International Development  
UST, underground gasoline storage tanks  
UVM, University of Vermont  
WBCSD, World Business Council for Sustainable Development  
WCDC, Winooski Community Development Corporation  
WfW, Working-for-Water  
WIH, waterfront isolation highway  
WIHNAR, waterfront isolation highway/neighborhood annihilation road  
WMATA, Washington Metropolitan Area Transit Authority



# Introduction

## Leaving Everything Better than We Found It

*Making our old economic model greener and more sustainable is like inventing a healthier form of cancer, rather than eliminating it.*

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*The 21<sup>st</sup> century will be the century of restoration.*

—Historian Stephen Ambrose (2001)

The twentieth century was the last and worst of the “de” centuries. The “de” age was based on *development*; *depletion* (fisheries, topsoil); *degradation*, *despoilment*, and *defilement* (pollution, destruction of heritage); *devitalization* (of communities and ecosystem services); *decrease* (of biodiversity); *decline* (in the planet’s inventory of fossil fuels, fossil waters, old-growth forests, and other irreplaceable assets); and *destabilization* (of our global economy and our global climate).

“De” typified earlier centuries as well, of course, especially since the Industrial Revolution. But the twentieth is when it all came to a head, and when the global “de/re shift” began to emerge in that century’s final decade. What a difference a prefix can make. *Development* is losing out to *redevelopment*. *Depletion* is yielding to *replenishment*. *Degradation* is being *replaced* by *remediation*. *Destruction* is giving way to *restoration*. *Degeneration* is morphing into *regeneration*, and so forth.

The term “rewealth” might be crassly construed as meaning “restoring the world for money.” But income isn’t the only reason people renew things and places. Nor is it the only reward enjoyed by those who *do* restore for money. Leaving the world better than we found it can have a profoundly restorative effect on the soul (however one might define soul) . . . whether or not personal renewal is an objective.

We all probably agree with Woody Allen that “money is better than poverty, if only for financial reasons,” but most of us also know that real wealth is measured by more factors than just income and property. It’s the pursuit of those other factors that has driven hundreds of thousands of people and companies to base their careers

and strategies on rewealth. Restoring the world *for a living* (as opposed to *for money*) might thus be a better definition of rewealth. A more philosophical definition is “living in a way that leaves both us and the world healthier and wealthier with each passing day.”

That latter definition leaves room for folks like Todd Parmington and Wendy Valint. They get great joy from restoring classic wooden canoes. Sounds like a hobby, right? But they purchase nasty, ugly old boats for between \$300 and \$500 and sell them for \$5,000, \$10,000, even \$15,000. The profit adds significantly to the joy of restoration. Their company in Buffalo, New York—Vintage Canoe Works—was featured in the August 14, 2007 issue of the *New York Times*, so we won't tell any more of their story in this book. They started restoring canoes for the joy and satisfaction; the money is almost accidental. Many people have stumbled into rewealth careers in this fashion.

But serious money can be involved. In these pages, you'll discover a former cultural anthropology student who didn't know what he wanted to be when he grew up. Wall Street now gives him a billion dollars at a time to restore the world.

You'll read the story of a couple of young surfers, one from California and the other from Argentina. They started a \$10 million beverage business that restores thousands of acres of endangered rain forest in three countries. The land had been destroyed by unsustainable agriculture. They restore the ecology in a way that actually *increases* its agricultural value. In the process David and Alex discovered how to restore nature and revitalize rural communities for a living. They've invented a “market-based restoration” model that could be adopted by corporations worldwide.

You'll be thrilled by the story of a tiny town—with no money and a mayor who earns \$1,000 a year—that unleashed a \$240,000,000 revitalization of their historic-but-blighted riverfront. The renewal sprang from a young man who as a child had fished the river's edge with his grandfather. He had long dreamed of reconnecting the community to its waterfalls. In the process of fulfilling that dream, he used a powerful new approach that's driving literally hundreds of billions of dollars in community revitalization annually, worldwide.

A similar approach is being adapted in places like South Africa. A government-lead initiative is using it to create a global climate change solution that produces biofuels in a way that restores ecosystems, farmlands, water, and forests . . . all while revitalizing tribes, towns, and cities. Addressing climate change promises to be a phenomenal economic driver of renewal via the renovation of our energy infrastructure,

the reforestation of damaged lands, and the switch to restorative agriculture. You'll discover all of these stories, and many more, in the pages to come.

The shift into such integrated modes of renewal—whereby the restoration of one asset helps restore others—is helping us avoid old behaviors that create two new problems for each one they solve. An typical example of the old approach is the recent scheme to dump rust into our oceans to take up carbon dioxide and thus fight global warming; as if the oceans don't have enough problems already.

We need to be looking for multifaceted solutions to global warming that serve many restorative agendas, not just climate-related ones. We need solutions that don't make us dependent upon a single technology or company. And these solutions shouldn't have deleterious side effects that will burden future generations.

A good start would be to acknowledge that dewealth (along with population growth, of course) is the fundamental cause of global warming. As long as our economy and our very existence is based on dewealth, any solutions we devise will be like learning basket weaving at a hospice; fun, creative, and even worthwhile . . . but not likely to delay our demise. The de/re shift is going to be the root of any systemic solutions. And public-private partnering will be the key to financing most of it.

The people, organizations, and places you'll read about here have put themselves in the forefront of the rewealth wave. They are being carried into a prosperous future on the 21<sup>st</sup> century's largest and most exciting trend. Whether your goal is to feed the hungry, save endangered species, reduce conflict, house the homeless, increase quality of life, renew culture, redevelop workforces, or recover from disaster, rewealth is the answer.

But shifting from dewealth to rewealth isn't the whole answer: rewealth must be combined with two other powerful factors to reliably create spectacular results. Together, they form the three universal "renewal rules." Applied simultaneously, they yield magic, and you'll learn all about them in Chapter 2.

Raising the bar from doing less damage to the world to actually healing it changes everything: education, business, environmentalism, land use, construction, agriculture, energy policy, water policy, and government, just to name a few affected areas. In fact, the shift to renewal reverses the very basis of wealth creation. Our current depletion-development paradigm has been accepted without significant questioning (until recently) for some five millennia.

Every community on earth seems to have the same basic goal: rapid, resilient renewal. Despite that, champions of restoration and regeneration are encountering

more political obstacles and funding problems than they should. It's not active resistance in most cases, just passive obstacles formed by outdated, sprawl-based policies, laws, and codes. There's now a quick, efficient solution to turning such "dewealth cultures" into "rewealth cultures."

*The nation behaves well if it treats the natural resources as assets which it must turn over to the next generation INCREASED . . . in value. (emphasis added)*

—Theodore Roosevelt, from "The New Nationalism" (1910),  
NWTR, XVII, p. 52 [National Edition of the Works of  
Theodore Roosevelt (New York, 1926, 20 vols.)  
(cited as NWTR.)]

Until you get to the word "increased," Teddy Roosevelt's words (above) sound like a standard call for conservation, stewardship, and responsible resource usage. But that single word "increased" changes everything. Leaving the world *better* than we found it is a very, very different proposition from merely slowing the rate of depletion and pollution. Conservation is essential, but it doesn't address the needs of wildlife whose habitat has already been destroyed.

All around the world, people are working to revitalize ecosystems, watersheds, rivers, coastal areas, and agricultural regions. Restorative development has tremendous popular appeal of a nonpartisan nature. Terms such as "green," "smart," and "sustainable"—pertinent though they are—often divide (or simply bore) people. The recent emergence of dialogs that label some forms of growth as "smart," "green," and "sustainable" is a definite step in the right direction, but they usually don't get to the heart of the matter. Destroying things in a greener manner is an improvement: if you're going to put that shopping center on top of the last natural wetland in the region, you might as well put solar panels on the roof. Sustainability is certainly a worthy goal, but what about the vast majority of the planet that's already badly damaged? Is sustaining—protecting it from further damage—good enough? Why not restore it?

Rewealth activities are usually nonpartisan, whereas smart growth and sustainable development in the U.S. are often supported by Democrats and opposed by Republicans. Virtually everyone gets excited about bringing places—natural or human—back to life. It doesn't matter whether they are tree huggers or bunny kickers: they love the drama and rewards of returning dead places to vibrancy. Even those who are averse to the sustainable development trend find

themselves enthusiastically involved in restorative development. Those who don't think twice about destroying our cultural or natural heritage find themselves oddly attracted to restoring it.

As one wag put it: if you ask me how my marriage is, and I say, "It's sustainable," are you going to feel happy or sorry for me? But if I answer, "It's revitalizing . . . it restores me on a daily basis," you'll probably be thrilled for me. If you can look around our planet and honestly say this is a situation you'd like to sustain, you're just not paying attention. I'm for restoring this mess.

*Ecological restoration is the re-framed environmental movement. We can restore faith in a better tomorrow.*

—Keith Bowers, former chairperson, Society for Ecological Restoration International, and CEO, Biohabitats, Inc.

Another problem is that so many rewealth advocates work in isolation . . . an ecosystem here, a historic building there. Economies and communities are living systems, and need to be treated as such. Instead, we treat them like automobile motors, yanking out an alternator or piston and slapping in a new one.

The best way to restore an asset is often to restore *more* than that particular asset, because all things exist in context. Everything is connected, although temporal lags often mask the relationship between cause and effect.

The most successful regeneration initiatives renew the natural, built, and socioeconomic environments *together*. These grand projects often have significant fringe benefits. They tap efficiencies and synergies to achieve greater profitability. They often have the horsepower to revamp public policy, making the path easier for subsequent renewal projects.

### **How to Power Rapid, Resilient Renewal**

Few communities have the knowledge or financial resources to tackle projects of great scope or complexity, but there's a solution to that: a new-but-proven tool described in these pages as a "renewal engine." Renewal engines enable communities to reliably envision, fund, implement, and maintain an upward trajectory.

With a renewal engine, communities revitalize their economy, their buildings and infrastructure, their culture, and their natural resources *together*. A renewal engine even generates the money that drives all this activity, becoming a magnet for restorative

investment. Sounds too good to be true, but you're about to read stories of those who pioneered renewal engines and those who are using them now.

Real solutions to global crises tend to have four characteristics. The renewal engine model has all four:

1. It requires little money to initiate. It can be launched anywhere, at any time, by anyone: non-governmental organization (NGO), entrepreneur, elected representative, government agency, corporation, private developer, foundation, or citizen.
2. It can be used by any community, region, or nation, regardless of its current condition, and regardless of its style of government: free-market democracy, socialist democracy, kingdom, or military dictatorship.
3. It resolves economic, environmental, and social problems together, rather than maintaining the artificial separation that is a root cause of many problems.
4. It is self-sustaining and scalable in any direction: it can be launched at a national scale and then applied to the tiniest communities, or it can start in a neighborhood and be ramped up to revitalize an entire country.

This book brings to light the industries, sciences, nonprofits, and people who thrive on revitalizing our communities and restoring our natural resources. It reveals how this historic, inevitable shift away from sprawl and extraction—toward redevelopment and replenishment—is transforming entrepreneurship, research and development, law, economics, investment, technology, government, international relations, and countless industries.

Until recently, we primarily addressed the environmental problems of the world—contaminated land, air, and water; crashing fisheries; dwindling biodiversity; exhausted or destroyed (by sprawl) farmland —by trying to slow down the rate of destruction and pollution, and by trying to save a few examples of pristine ecosystems for future generations. All well and good. But despite its good intentions, this rearguard approach only delays inevitable economic and environmental disaster; it hardly lives up to the goal of leaving things better than we found them.

This is bad news for those whose living is based on putting “green” bandages on our bleeding, dying, dewealth economic model. That model equates economic growth with the conquering of new lands and the extraction of virgin resources. Not only is that model obsolete, it has also become highly toxic.

This pioneer-style dewealth model keeps lumbering along like a zombie, the economic equivalent of the living dead, eating the assets we treasure. It's maintained by an artificial life support system of archaic industries, policies, laws, codes, and regulations based on dewealth. For the past few decades, we've been trying to make that system more environmentally and socially responsible. But that's like leaving organized crime in charge of a city after establishing a new code of ethics.

The rise of rewealth is drastically raising our expectations. We now want to reverse, not just slow, our slide into economic decline and reverse—not just slow—the decay of our quality of life. We're now seeing cities and ecosystems come back to life on a monumental scale. We're seeing a future based on rewealth, and we want it now.

We now know it's possible for a place to become healthier, wealthier, and more beautiful with each passing year, and we want to put all places on that path. Not all communities can step onto the path of renewal simultaneously, of course. But the more that are renewed, the easier it is for others to renew. Revitalization begets revitalization.

As a result of these contagious success stories, a huge new “restoration economy” (what I now call a “reconomy,” as opposed to a “deconomy”) has arisen. It already accounts for about \$2 trillion of activity annually, worldwide. There's as much money to be made restoring our world as there was to be made from plundering it; *more* in fact, since global resources have been so severely diminished. Perversely, restoring damage has proved to be easier politically (though far more expensive) than preventing damage in the first place.

But, surprisingly, the reconomy also drives conservation. Thanks to these restorative industries, we can now put hard numbers on the cost of destroying our world. This gives us the ability to file lawsuits demanding reparation for quantifiable damages, rather than imposing arbitrary fines. We've documented that each acre of remediated and redeveloped urban brownfields saves 4.5 acres of greenfields, so brownfield reuse is both an economic growth strategy and a conservation strategy.

Before the rise of the reconomy, we never really knew how much it would cost to fully restore a gold mine (tens or hundreds of millions), or to clean up a nuclear processing facility (billions). Now we have that knowledge, and it gives us the ability to collect accurate restoration deposits from extractive industries before they begin operations. This, of course, will discourage many from starting. Such restoration cost data thus does more to prevent future damage than all the “good stewardship” philosophies in the world.

*People change what they do less because they are given analysis that shifts their thinking than because they are shown a truth that influences their feelings. This is especially so in large-scale organizational change . . .*

—John P. Kotter and Dan S. Cohen, *The Heart of Change: Real-Life Stories of How People Change Their Organizations* (Harvard Business School Press, 2002)

The innocuous-sounding homily—“leave things better than you found them”—that we sometimes heard from our grandparents is often regarded as little more than a piece of homespun philosophy. It’s an axiom, something agree with without question. But how often does it make the leap to business strategy or public policy? Now, this same impulse that motivates a person to pick up a piece of litter, or to clean off a toilet seat after using it, is now driving a global economic revolution. What’s maybe more amazing is that the reeconomy emerged on its own; no one said “this is what we should do” and made it happen.

Most of this reeconomy is driven by the profit motive, as is the deconomy. The difference is that turning problems into valuable assets is like turning lead into gold: you’re a magician and a hero when you do so. Turning an old-growth Douglas fir into toilet paper or newspaper was marvelous new technology in the early deconomy. Today it’s just nasty: few will admire you—and most will hate you—for doing so, especially when recycled paper stock is plentiful. The de/re shift thus redefines good guys and bad guys. We now tend to hate developers and love (most) redevelopers.

Closer examination of that folksy maxim, “leave things better than you found them,” reveals it to be a revolutionary call of the first magnitude. In fact, it’s already undermining vast, well-established industries and replacing them with new industries that are revitalizing our global economy and restoring our natural resources. What alters the economy alters government, education, science, and society . . . and us.

Aldo Leopold said, “The oldest task in human history: to live on a piece of land without spoiling it.” Thanks to centuries of *failing* to live on our land without spoiling it, the newest task for the human future is to restore the planet we have spoiled.

The shift to rewealth has been surprisingly fast for two key reasons. First, it doesn’t require any change in human nature. We can continue to be aggressive, selfish, wasteful, and short-sighted if we want, and we’ll still be leaving things better than we found them.

Second, it taps an entirely different wealth-creation process from the one that we have relied on for millennia, and this one knows no limits. Unlike dewealth,

rewealth can be exploited to our heart's content. I've never heard people complain, "Our river has too many fish!" or, "We've removed too much contamination from our land!" or, "Our historic buildings are too beautiful!" or, "We don't want any more enhancement of our quality of life!"

The shift from dewealth to rewealth is upon us. Here's one sure sign that rewealth is going mainstream: it's developing its own humor. I recently came across this pun: "Wetland restoration = a repairian zone." (For nonecologist readers: the land bordering a river or stream is a riparian zone.) You didn't split a gut laughing? So sue me.

Part of the appeal of rewealth is the deep joy and satisfaction experienced by a person who takes something that's dying, useless, or ugly and returns it to health, value, and beauty. Gazing upon the results and saying "I did that!" is one of life's great thrills. Doing it for a living elevates it from momentary thrill to ecstasy. OK, that's a bit over-the-top, but it's closer to the truth than you might imagine.

It's time to ensure that the next generation is the regeneration. It's time to stop being debased, and become rebased. It's time to revitalize the world together!

