

CONTENTS

FOREWORD	xv
ACKNOWLEDGMENTS	xvii
Chapter 1. Is The Restoration of Urban Streams Possible?	1
<i>How Urban Streams Differ from Streams in Other Settings</i>	3
<i>How Urban Streams Evolve</i>	10
<i>Clarifying Different Perspectives on Restoration</i>	12
<i>Applying Local Examples to Other Restorations</i>	12
<i>Case Study Geography and Demographics</i>	13
<i>References</i>	20
Chapter 2. Defining Restoration	22
<i>Restoration Levels</i>	25
<i>Form and Function</i>	38
<i>Restoration Objectives for Case Studies</i>	40
<i>Schools of Restoration</i>	43
<i>References</i>	49
Chapter 3. Neighborhood-Scale Restoration Projects	53
<i>Snowberry Creek Daylighting in Rail Yard, Berkeley, 1983</i>	54
<i>Project History</i>	54
<i>Project Design and Construction</i>	57
<i>Landscaping and Maintenance</i>	59

Related Projects	63
Project Lessons and Significance	64
<i>Glen Echo Creek Reconstruction, Oakland, 1985</i>	66
Project History	66
Project Design and Construction	69
Landscaping and Maintenance	72
Related Projects	75
Project Lessons and Significance	78
<i>Blackberry Creek, Daylighting in Thousand Oaks Elementary School Yard, Berkeley, 1995</i>	80
Project History	80
Statewide and National Context	84
Project Design and Construction	86
Landscaping and Maintenance	93
Project Lessons and Significance	101
<i>Baxter Creek, Daylighting in a Median Strip, El Cerrito, 1996</i>	111
Project History	111
Project Design and Construction	115
Landscaping and Maintenance	122
Project Lessons and Significance	125
Related Projects	134
<i>Baxter Creek at Booker T. Anderson Park, Richmond, 2000</i>	136
Project History and Description	136
Maintaining Riparian Corridors in High-Crime Areas	141
<i>Baxter Creek Gateway Project, El Cerrito, 2005</i>	146
Project History	146
Project Planning, Design, and Construction	148
<i>Ohlone Gap Green Way, Richmond</i>	151
<i>Mira Flores Project, Richmond</i>	152
<i>Village Creek Daylighting in Housing Redevelopment, Albany, 1998</i>	153
Project History	153
Project Design and Construction	158
Project Lessons and Significance	163
<i>Beaver Restoration Crews on Alhambra Creek, Downtown Martinez, 2008</i>	171
Project History	171
Project Design and Construction	175
Project Lessons and Significance	178
Other Alhambra Creek Watershed Projects	179
<i>References</i>	181

Chapter 4. What Neighborhood Projects Teach	188
<i>Setting Project Objectives</i>	189
<i>How Projects Happen</i>	191
<i>Restoration Design Methods Evolve</i>	193
<i>Applying the Schools of Restoration</i>	195
Passive School	195
Channel Evolution School	200
Stream Process Descriptions	201
Applying Analogs	202
Empirical Methods, Including Hydraulic Geometry and Regional Curves	203
Analytical School and Hydrology	214
Biological Sciences	218
<i>Project Installation</i>	228
Revegetation Strategies	228
Maintenance	235
<i>Project Costs: Design Build and Formal Bid Contracts</i>	236
<i>Conclusions and Recommendations</i>	240
Project Planning and Design	241
Managing the Homeless and Fears of Habitat in Cities	242
Project Assessments	244
Functional Riparian Restoration	247
The Keystone to Watershed Restoration: Citizen Involvement	248
<i>References</i>	249
APPENDIX. REGIONAL SAN FRANCISCO BAY RESTORATION PLANT SURVIVORS AND PLANTS ASSOCIATED WITH MORE RISK TO SURVIVAL (COMMON AND LATIN NAMES)	255
ABOUT THE AUTHOR	259
INDEX	261