

# Contents

About the Author .....	xv
Author's Preface and Acknowledgements .....	xvii
Planning Forward .....	xxi
Legal Foreword .....	xxv
Chapter 1: The Long Arch of Local Environmental Law .....	1
I. The Ancients Stole All Our Good Ideas .....	1
A. Antecedents From Before the Common Era .....	1
B. Early U.S. Efforts to Balance Conservation and Development .....	2
C. Setting the Stage for a New Legal Regime .....	5
II. Combining Land Use and Environmental Values .....	6
A. The First Fifty Years—Conservation Light .....	6
B. Early Case Studies: Florida, Colorado, California, and New York .....	7
C. Abiding Discontent With the Reigning Land Use System .....	9
III. The Advent of Local Environmental Law .....	10
IV. Current Trends in a Changing Society .....	13
A. Demographic Trends .....	13
B. Projected Growth and Development .....	13
C. The Ultimate Perturbation—Climate Change .....	14
V. Conclusion: Local Environmental Law in America .....	15
A. Chapter-by-Chapter: The Story of U.S. Land Use Law and the Environment .....	15
B. How to Use the Law for Positive Change .....	19

Chapter 2: Protecting the Environment Through Land Use Law:  
 Standing Ground ..... 23

- I. Overview of Land Use Regulation and Environmental Law..... 23
  - A. The Original Blueprint .....23
  - B. Common Law Origins and the Colonial Period..... 24
  - C. The Formation of the Federal Republic .....26
  - D. The Modern Era of Zoning..... 29
- II. Exploring Municipal Authority to Control Private Land Use and Its Limitations ..... 33
  - A. Interpreting Local Authority .....33
  - B. State and Federal Guidance for Localities ..... 35
  - C. State and Federal Preemption of Local Control .....36
- III. Shared Responsibility for Protecting the Environment .... 37
  - A. Overlapping Regulations .....37
  - B. Strategies for Integration..... 38
- IV. Attempts to Collaborate: Stormwater Management and the Total Maximum Daily Load Programs ..... 41
  - A. Stormwater Management..... 41
  - B. Total Maximum Daily Loads (TMDL) ..... 44
- V. Hydraulic Fracturing: Fragmenting the Federal System ... 47
  - A. Who Should Decide? ..... 47
  - B. Federal Regulation of Environmental Pollution Caused by Hydraulic Fracturing ..... 49
  - C. State Regulation of Drilling Operations..... 50
  - D. Local Regulation of Land Use Impacts ..... 52
  - E. Cooperative Governance..... 54
- V. Integrating Governmental Influences..... 56

Chapter 3: An Environmental Understanding of the Local Land Use System ..... 61

- I. Planning, Zoning, and Land Development Basics ..... 61
  - A. The Basics of Land Use Planning ..... 61
  - B. The Rapid Rise of Zoning..... 62

C.	Land Development Regulations and Plan Consistency.....	63
II.	Land Use Plans and the Environment.....	63
A.	The Comprehensive Plan .....	63
B.	Development of the Plan.....	64
C.	Content of the Plan.....	65
D.	Environmental Benefits of Plan Consistency .....	66
E.	Periodic Review.....	67
F.	Area Specific Plans.....	67
G.	Intermunicipal, Regional, and Interstate Planning...	68
III.	Zoning and the Environment .....	69
A.	Definition and Legal Authority.....	69
B.	Examples of Local Zoning That Protects the Environment.....	72
C.	Zoning Amendments.....	74
IV.	Land Development Regulations.....	76
A.	Site Plan Regulations .....	76
B.	Subdivision Regulations .....	79
C.	Cluster Development and Conservation Subdivisions.....	81
V.	The Review and Approval of Land Development Proposals.....	84
A.	Local Land Use Boards .....	84
B.	Approving Projects to Protect the Environment .....	84
VI.	Balancing Conservation and Development .....	86
A.	Area Designation and Growth Management.....	86
B.	Balance Over Time—Phasing Public Facilities.....	89
C.	Environmental Impact Review .....	91
D.	Incentive Zoning.....	91
E.	Overlay Zoning.....	92
F.	Planned Unit Development Zoning .....	94
G.	Transfer of Development Rights.....	96
H.	Sustainable Neighborhood Development .....	98

- VII. The Sustainable Development Law Movement:
  - Reacting to Climate Change..... 101
  - A. New Environmental Challenges..... 101
  - B. Opportunity for Sustainable Development ..... 102
- Chapter 4: Innovations in Local Environmental Law..... 109
  - I. Local Environmental and Land Use Law ..... 109
  - II. Protecting Natural Resources Through Local Environmental Law..... 110
    - A. Purposes..... 110
    - B. Watershed Protection and Management..... 113
    - C. Stormwater Management..... 119
    - D. Wetlands Protection ..... 123
    - E. Floodplains ..... 129
    - F. Erosion and Sediment Control ..... 133
    - G. Fish and Wildlife Habitat ..... 137
    - H. Ridgeline Protection..... 142
    - I. Scenic Resources ..... 145
    - J. Steep Slope Protection ..... 149
    - K. Timber Harvesting Regulation ..... 152
    - L. Tree Preservation..... 155
  - III. A Holistic Approach: The Environmental Protection Overlay District..... 159
    - A. Review of Overlay Zoning ..... 159
    - B. A Model Environmental Protection Overlay District ..... 159
    - C. Purpose and Objectives..... 159
    - D. Conservation Area Management..... 160
  - IV. Creating a Local Environmental Law Program..... 161
    - A. Form a Citizen Task Force..... 162
    - B. Conduct an Open Space Inventory..... 162
    - C. Create a Greenprint ..... 162
    - D. Include the Greenprint in the Comprehensive Plan ..... 164

E.	Amend Zoning.....	164
F.	Enact Project Review Standards .....	165
G.	Enforcement .....	165
H.	Work with Landowners and Acquire Most Sensitive Parcels .....	166
I.	Cooperate With Adjacent Municipalities.....	167
J.	Leverage State and Federal Resources.....	167
V.	Extending the Reach of Environmental Law.....	168
Chapter 5: Open Space Preservation and Biological		
	Sequestration .....	175
I.	Land Use Strategies That Preserve Open Space.....	175
A.	Righting the Loss of Open Space .....	175
B.	Open Space and Its Functions .....	175
C.	The Primacy of Local Power.....	176
D.	Local Strategies .....	177
II.	Local Open Space Preservation Techniques .....	178
A.	Zoning and Planning.....	178
B.	Better Site Planning.....	182
C.	Clustering Development.....	184
D.	Low Impact Conservation Subdivisions.....	186
E.	Supplemental Regulations .....	188
F.	Density Bonuses .....	188
G.	Transfer of Development Rights.....	189
H.	Timber-Harvesting Ordinances.....	190
I.	Rearranging Development on Multiple Parcels.....	192
III.	The Strategic Acquisition of Open Lands .....	192
A.	State and Local Authority to Acquire Land .....	192
B.	State Financing of Open Space Acquisition .....	196
C.	Local Financing Sources.....	198
D.	Land Acquisition Techniques .....	199

- IV. Recalibrating Open Space Law to Manage Climate Change ..... 203
  - A. Bringing Open Space Law to Scale: Biological Sequestration..... 203
  - B. The Gathering Consensus Regarding Climate Change Management ..... 204
  - C. The Importance of Biological Sequestration to Mitigate Climate Change..... 206
  - D. Using Open Space Law to Accomplish Sequestration..... 209
  - E. Toward a National Strategy for Biological Sequestration..... 210
  
- Chapter 6: Climate Adaptation and Disaster Mitigation: Land Use Strategies..... 217
  - I. Climate Change, Adaptation, and Disasters ..... 217
    - A. Inundation, Flooding, and Fiercer Storms..... 217
    - B. Policy Options ..... 219
    - C. Local Role: First Affected and First to Respond ... 221
  - II. Federal Actions: Policy, Funding, and Technical Assistance..... 224
    - A. Supportive Role of the Federal Government ..... 224
    - B. Disaster Mitigation Act of 2000 ..... 225
    - C. Coastal Zone Management Act of 1972..... 227
  - III. State Actions: Plenary Power and Coordination..... 229
    - A. Intermediary Between Federal and Local Governments..... 229
    - B. Types of State Actions ..... 231
    - C. Florida: A Case Study in Direct State Action—Beach Renourishment ..... 234
  - IV. Local Initiatives ..... 237
    - A. General Strategies ..... 237
    - B. Case Studies..... 245

V.	Dealing With Judicial Decisions .....	249
A.	Ambiguity in Supreme Court Jurisprudence.....	249
B.	Antidotes for the Legacy of Lucas.....	250
C.	Changes in the Regulatory Environment.....	253
VI.	Societies Choosing to Succeed .....	254
Chapter 7: Enhancing the Urban Environment Through Green		
	Infrastructure .....	261
I.	The Advent of Green Infrastructure.....	261
A.	Definition .....	261
B.	Benefits and Purpose.....	263
C.	The Emergence of a New Urban Planning Initiative .....	264
II.	Initiatives That Emphasize Green Infrastructure.....	265
A.	Low Impact Development.....	265
B.	Sustainable Sites Initiative (SITES™) .....	268
C.	LEED for Neighborhood Development.....	273
D.	SmartCode.....	276
E.	Urban Agriculture .....	277
III.	Additional Techniques That Advance Green Infrastructure .....	277
A.	Increasing Tree Canopies.....	278
B.	Green Roofs and Planters .....	280
C.	Xeriscaping Requirements .....	282
D.	Green Streets .....	283
E.	Rainwater Harvesting and On-site Retention .....	284
F.	Green Infrastructure Maintenance: Ensuring Continued Compliance .....	286
IV.	A Municipal Case Study: Portland, Oregon .....	291
V.	Grassroots Strategy.....	292
A.	Citizen Engagement .....	292
B.	The Natural Resource Inventory .....	293
C.	Green Infrastructure Planning in a Dense Urban Community .....	294
	Appendix: Further Resources .....	295

Chapter 8: Urban Agriculture..... 299

- I. A Truly Local Movement: Urban Agriculture and Land Use Law..... 299
  - A. Definition..... 300
  - B. Trends..... 300
- II. Benefits of Urban Agriculture..... 302
  - A. Environmental ..... 302
  - B. Health..... 303
  - C. Economic..... 304
- III. Concerns Raised by Urban Agriculture ..... 305
- IV. Land Use Barriers to Urban Agriculture ..... 307
  - A. District or Zone Limitations..... 307
  - B. Lot Sizes and Setbacks..... 308
  - C. Number and Licensing of Animals..... 308
  - D. Restrictions on Sale of Products From Urban Farms..... 309
- V. Zoning Changes That Legalize Agriculture Uses ..... 309
  - A. Seattle, Washington..... 310
  - B. Pittsburgh, Pennsylvania..... 310
  - C. Philadelphia, Pennsylvania..... 311
  - D. Jersey City, New Jersey ..... 311
  - E. Portland, Oregon ..... 311
  - F. New York, New York..... 312
- VI. Recommendations for Further Cultivation ..... 313
  - A. Adopt a Policy Statement or Municipal Resolution Supporting Urban Agriculture..... 313
  - B. Establish an Urban Agriculture Task Force..... 314
  - C. Amend the Zoning Ordinance and Related Regulations ..... 318
  - D. Other Municipal Efforts to Promote Urban Agriculture..... 318
- VII. Facilitating the Movement Through Land Use Law Reform ..... 319



Appendix: City and County of San Francisco, California: Urban Agriculture.....	320
Chapter 9: Balancing Conservation and Development Through Environmental Impact Review .....	327
I.    Role of Environmental Impact Review: NEPA and Its Progeny.....	327
A.    The National Environmental Policy (NEPA).....	327
II.   State Environment Policy Acts and Their Effects on Local Governments .....	328
A.    Overview of State Environmental Policy Acts .....	328
B.    The California Environmental Quality Act .....	328
C.    New York—The State Environmental Quality Review Act.....	335
D.    The Washington State Environmental Policy Act.....	342
III.  Beyond SEPAs: Implied Authority of Local Governments to Conduct Environmental Reviews .....	346
A.    Implied vs. Express Powers .....	346
B.    Authority to Enact Land Use Regulations.....	347
C.    Authority to Adopt Local Environmental Impact Review .....	348
D.    Local Illustrations .....	350
IV.  Advanced Environmental Impact Review Techniques ....	355
A.    Master Impact Reviews, Program EIRs, and Generic Environmental Impact Statements.....	355
B.    Cumulative Impact Analysis (CIA).....	356
C.    Critical Environmental Areas .....	358
D.    Mitigation Conditions .....	360
E.    Avoiding Unconstitutional Conditions Using EIR Techniques.....	362
V.   Integrating Environmental Impact Review With Local Planning .....	364
A.    Potential Duplication and Inefficiency in Environmental Review .....	364

- B. Methods of Integration ..... 364
- VI. Using Environmental Impact Review to Balance Conservation and Development ..... 367
- Appendix: Streamlining the Environmental Impact Review of Redevelopment Projects..... 368
- Chapter 10: Environmental Dispute Resolution and Land Use Decisionmaking ..... 377
  - I. Land Use Decisions and Negotiations: Inherent Conflicts and Alternative Processes ..... 377
    - A. Achieving Balance Through Conflict Resolution ... 377
    - B. Land Use Decisions As Negotiations..... 378
    - C. Using Dispute Resolution Early to Minimize Conflict ..... 379
    - D. Understanding Mediation..... 380
    - E. Opportunities to Use Dispute Resolution in Land Use Decisionmaking..... 381
    - F. Community Leaders As Facilitators..... 383
  - II. History and Legal Authority: Mediation and Land Use Conflicts ..... 383
    - A. The History of Mediation..... 383
    - B. The Evolution of Mediation in Land Use Resolution..... 384
    - C. Statutorily Authorized Mediation ..... 386
    - D. Mediated Settlements Achieved by Stakeholders in the Absence of Statutory Authorization..... 387
  - III. The Theory and Techniques of EDR..... 391
    - A. Interest-Based Negotiation ..... 391
    - B. The Mutual Gains Concept: Interests Versus Positions ..... 393
    - C. Reasons to Use Consensus-Building Techniques .... 394
    - D. Common Objections to Consensus-Building Techniques and Responses..... 395
  - IV. How to Build Consensus..... 399
    - Step 1: Identify the Key Stakeholders ..... 399

Step 2: Assess Feasibility of a Consensus-Building Process .....	400
Step 3: Prepare for the First Meeting .....	400
Step 4: Convene Meeting .....	401
Step 5: Conduct of Meetings.....	402
Step 6: Meeting Summary .....	402
Step 7: Implementation .....	402
V. Adopting a State Law Supporting Land Use Mediation .....	403
VI. Supplementing the Land Use Decisionmaking Process .....	404
Appendix: Model Local Land Use Mediation Law .....	405
Index .....	411