

## CONTENTS

### **Part I Principles of Environmental Science 1**

- |  |    |
|--|----|
| 1. Environmental Science: Meeting the Challenge            | 2  |
| 2. New Visions of Life: Evolution of a Living Planet       | 18 |
| 3. Principles of Ecology: Ecosystem Structure and Function | 51 |
| 4. Principles of Ecology: Ecosystem Balance and Imbalance  | 81 |

### **Part II Population 105**

- |   |     |
|---|-----|
| 5. Population: Measuring Growth and Its Impact      | 106 |
| 6. Population Control: Key to a Sustainable Society | 124 |

### **Part III Resources 141**

- |  |     |
|--|-----|
| 8. Wildlife and Plants: Preserving Biological Diversity              | 168 |
| 9. Rangeland, Forest, and Wilderness: preserving Renewable Resources | 188 |
| 10. Water Resources: Preserving Our Liquid Assets                    | 208 |
| 11. Energy: Winning a Dangerous Game                                 | 231 |
| 12. Future Energy: making the Best Choices                           | 248 |
| 13. The Earth and Its Mineral Resources                              | 287 |

### **Part VI Pollution 301**

- |  |     |
|--|-----|
| 14. Toxic Substances: Principles and Practicalities    | 302 |
| 15. Air Pollution: Protecting a Global Commons         | 326 |
| 16. Water Pollution: Protecting Another Global Commons | 375 |
| 17. Pesticides: A Double-Edged Sword                   | 396 |
| 18. Hazardous Wastes: Progress and Pollution           | 414 |

### **Part V Environment and Society 433**

- |   |     |
|---|-----|
| 19. Environmental Ethics: The Foundation of a Sustainable Society | 434 |
| 20. Economics and the Environment                                 | 447 |
| 21. Government and the Environment                                | 466 |
| 22. Putting It All Together: Building a Sustainable Society       | 485 |

### **Appendix A Environmental Publications 497**

### **Appendix B Environmental and Governmental Organizations 499**

### **Glossary 503**

### **Text and Photo Credits 517**

### **Index 521**