

Contents

| | |
|---|------------|
| Contributors | vii |
| Preface | ix |
| 1 Sediment Cascades in the Environment: An Integrated Approach | 1 |
| Timothy P. Burt, Durham University, UK and Robert J. Allison, University of Sussex, UK | |
| 2 Mountains and Montane Channels | 17 |
| Michael Church, University of British Columbia, Canada | |
| 3 Landslides and Rockfalls | 55 |
| Nick J. Rosser, Durham University, UK | |
| 4 Sediment Cascades in Active Landscapes | 89 |
| Tim R. H. Davies, University of Canterbury, New Zealand and Oliver Korup, Swiss Federal Institute for Forest, Snow and Landscape Research | |
| 5 Pacific Rim Steeplands | 117 |
| Basil Gomez, Indiana State University, USA Michael J. Page, GNS Science, New Zealand Noel A. Trustrum, GNS Science, New Zealand | |
| 6 Local Buffers to the Sediment Cascade: Debris Cones and Alluvial Fans | 153 |
| Adrian M. Harvey, University of Liverpool, UK | |
| 7 Overland Flow and Soil Erosion | 181 |
| Louise J. Bracken, Durham University, UK | |
| 8 Erosional Processes and Sediment Transport in Upland Mires | 217 |
| Martin G. Evans, University of Manchester, UK and Timothy P. Burt, Durham University, UK | |

| | |
|---|------------|
| 9 Gravel-Bed Rivers | 241 |
| Michael Church, University of British Columbia, Canada | |
| 10 The Fine-Sediment Cascade | 271 |
| Pamela S. Naden, Centre for Ecology and Hydrology, UK | |
| 11 Streams, Valleys and Floodplains in the Sediment Cascade | 307 |
| Stanley W. Trimble, University of California at Los Angeles, USA | |
| 12 Lakes and Reservoirs in the Sediment Cascade | 345 |
| Ian D.L. Foster, University of Westminster, UK | |
| 13 Continental-Scale River Basins | 377 |
| David L. Higgitt, National University of Singapore | |
| 14 Estuaries | 403 |
| Tom Spencer, Cambridge University, UK and Denise J. Reed, University of New Orleans, USA | |
| 15 The Continental Shelf and Continental Slope | 433 |
| David N. Petley, Durham University, UK | |
| Index | 449 |