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Nota di contenuto	Chapter 1: Introduction Interdisciplinary Environmental Solutions -- Chapter 2:Introduction Complexity of environmental systems -- Chapter 3: Illustration of System Complexity and Need for integrative analysis for effective solutions -- Chapter 4: Place, Space, Scale, Geospatial Analysis and GIS -- Chapter 5: Uncertainty Issues with Complex System -- Chapter 6: Role of Place (Space) in Decision Support Systems -- Chapter 7: Place-based approaches to Integrated Environment Solutions -- Chapter 8: Role of place and space in identification of environmental problems and finding solutions -- Chapter 9: Geographic Problem Solving: Summary of key environmental problems that need integrative approaches and the notion of

uncertainty associated with 'ways of knowing' -- Chapter 10: GIS, GeoAI, and Geospatial Framework For Integrated Place-Based Approach -- Chapter 11: Conceptual Framework for Integration of Terrestrial Systems and Aquatic Sinks using Systems Thinking and Place-based Approach -- Chapter 12: Spatio-temporal variability of water quality and watershed relationship -- Chapter 13: The Impact of Wildfire on Soil Erosion and Water Quality using a GIS-integrated Framework -- Chapter 14: Geospatially Integrated Drainage Basin Scale Sediment Dynamics Under Projected Future Climate Conditions In South East Georgia, USA -- Chapter 15: Linking Watershed's Properties to MPAs: Integration of Terrestrial Source, Landuse, and Watershed Hydrogeology in Coastal MPA Management -- Chapter 16: Modeling of Surface and Groundwater Contamination to Assess Human Health Risk: An Integrated Geospatial Approach -- Chapter 17: Application of a geospatially integrated species distribution model for seagrass in an urbanized estuary -- Chapter 18: Role of Place/Space in Conservation and Multi-scale Analysis -- Chapter 19: Analyzing Public Responses from Qualitative Data through Spatial Distribution Analysis Utilizing GIS for Effective Resilience Planning -- Chapter 20: Sensitivity Analysis and the use of Geospatial Framework: a Case Study of Soil Moisture and Soil Water Balance -- Chapter 21: Comparison of RUSLE and MUSLE models to predict and estimate soil erosion : a geospatially integrated sensitivity analysis -- Chapter 22: Comparison of Sensitivity analysis with ANN and SVM for Water Budget Calculations.

Sommario/riassunto

This textbook presents a clear and accessible argument for sustainable planning and development. The book discusses multiple environmental issues and examines how potential solutions can and should be addressed in the context of space and place. The book also offers an invaluable discussion on the need for a framework for system-based thinking where various disciplines should work together to find innovative solutions. Students are provided with an appreciation of the need for an interdisciplinary approach to these issues combined with an underlying sense of space, an appreciation of cultural diversity and differences, as well as associated insights into human relationships. These core attributes put space at the heart of environmental and natural resources management, in terms of policy, planning and on-the-ground initiatives. This book will be an invaluable reference for advanced undergraduate, graduate students and researchers working in the field looking for an accessible overview of this interdisciplinary approach to the topic.
