1. Record Nr. UNINA9910337589303321 Autore Lugo Ariel E Titolo Social-Ecological-Technological Effects of Hurricane María on Puerto Rico: Planning for Resilience under Extreme Events / / by Ariel E. Lugo Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2019 **ISBN** 3-030-02387-7 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (116 pages) Collana Energy Analysis, , 2191-7876 Disciplina 551.552 Soggetti **Energy security** Urban geography Sustainable development Urban ecology (Biology) Public policy **Energy Security** Urban Geography / Urbanism (inc. megacities, cities, towns) Sustainable Development Urban Ecology **Public Policy** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Preface -- Summary -- Introduction -- Pre-María -- Immediate Social Nota di contenuto and Technological Effects -- Immediate Ecological Effects -- Recovery and Long-Term Effects -- Vulnerability of Puerto Rico to Hurricanes --Roots of Puerto Rico's Vulnerability to Hurricanes -- Out of Control Capitalism -- Unacceptable Behaviors -- Failures of Local Elites --Corruption Schemes -- Fundamental Lessons of Hurricane María --Looking to 2080: A New Puerto Rico -- María and Puerto Rico as an Experiment -- The Energetics of Disturbances and Extreme Events --Acknowledgments -- List of Figures -- Appendix 1. My report to the U. S. Forest Service Washington Office -- Appendix 2. Facebook posting

by scientist Whendee Silver -- Appendix 3. A poem to hurricane Maria

by Institute employee Maria Milagros Rivera -- Appendix 4. A remembrance by Gabriela Morales, a senior Biology student at the

University of Puerto Rico -- Appendix 5. Huracán María – El Tallonal, Bitácora by Abel Vale, President of Citizens for the Karst -- Appendix 6. El huracán María desde el Bo. Piñales de Añasco y sus efectos en los Bosques del noroeste de Puerto Rico by Oscar J. Abelleira Martínez -- Appendix 7. A Puerto Rican on the mainland: What you can learn from a disaster (when you are lucky not to actually be in one) by Tischa Muñoz Erickson -- Appendix 8. A vision for the future of Puerto Rico articulated in 2005 by the Environmental Council of Governor Sila María Calderón.

Sommario/riassunto

This book deals with the immediate effects of, and response to. Hurricane María on the social, ecological, and technological systems (SETS) of Puerto Rico. The SETS approach to analyzing hurricane effects places into historical context the role of social and technological factors, and compares social and ecological resilience on the same temporal scales. Written from the perspective of a Puerto Rican scientist who experienced Maria's wrath first-hand, the book uses extensive empirical knowledge of the ecological effects of hurricanes on Caribbean forests and combines that knowledge with a detailed analysis of the effects of Hurricane María on the social and technological fabric of Puerto Rico. The comparison suggests that the effects of extreme events are dictated not only by the strength of the physical event, but also by the conditions of affected SETS at the time when the event exerts influence over them. Moreover, SETS have historical legacies that influence how resilient they can be when affected by an extreme event. Therefore, preparation and response to extreme events require an integrated social, ecological, and technological effort, known as the SETS response. The SETS response requires an understanding of the energetics of extreme events and their effects on the economy, which in turn determines social and technological resilience. Hurricane María demonstrated that the social and technological systems of Puerto Rico were not adapted to dealing with extreme events, in contrast with the ecological systems, which were. Hurricane María's effect on Puerto Rico can be used as an example from which valuable lessons emerge for making SETS more adaptable and resilient to extreme events.