

Preface

Purpose of the Book

The goal of this book is to introduce readers to *Mental Modeling*, an evidence-based process to facilitate decision making by describing the values and knowledge of individuals involved in the decision-making process. The book is tailored to students and practitioners in environmental and risk management domains who have some experience with the complex, often difficult projects that require engagement and understanding of the thoughts and beliefs of different stakeholder groups. Mental Modeling is ideally suited to contexts in which (a) the issues of interest are complex with a significant degree of consequence, (b) disparate viewpoints related to the issue or opportunity gaps must be synthesized, (c) decisions are required among multiple potential alternative risk management options, and/or (d) transparency is required when characterizing the issue, incorporating stakeholder input, designing appropriate risk management solutions, and justifying risk management actions. It is particularly well suited to identifying relationships among influences that may not be easily anticipated and providing a basis for developing or comparing solution alternatives for complex real-world problems.

How to Read This Book

This book is designed as an introduction to students and practitioners in public policy, risk communication, and related disciplines. The first sections provide an introduction to the process historically and as it stands today, and should be reviewed first to provide context to the other content in the book. Subsequent chapters, in contrast, are intended as a showcase of the different application domains where Mental Modeling

has been successfully applied to address complex problems. These chapters can be read piecemeal depending on the reader's needs and interests. Commentaries and testimonials are dispersed throughout the text to highlight some of the method's strengths and future directions for using the Mental Modeling approach.

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Mental Modeling Approach

Risk Management Application Case Studies

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2017, XXVII, 261 p. 66 illus., 61 illus. in color., Hardcover

ISBN: 978-1-4939-6614-1