

1. Record Nr.	UNINA9910778626803321
Titolo	Risk analysis and uncertainty in flood damage reduction studies // Committee on Risk-Based Analysis for Flood Damage Reduction, Water Science and Technology Board, Commission on Geosciences, Environment, and Resources, National Research Council
Pubbl/distr/stampa	Washington, D.C. ; ; [Great Britain] : , : National Academy Press, , 2000
ISBN	0-309-13289-4 1-280-18536-8 9786610185368 0-309-56982-6
Descrizione fisica	1 online resource (216 pages) : illustrations, maps
Disciplina	363.34936
Soggetti	Flood damage prevention - Risk assessment Flood damage prevention - Research
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	<p>""RISK ANALYSIS AND UNCERTAINTY IN FLOOD DAMAGE REDUCTION STUDIES""; ""Copyright""; ""Preface""; ""Contents""; ""Executive Summary""; ""APPLICATION OF RISK ANALYSIS TECHNIQUES""; ""Risk Measures and Modeling""; ""Economics""; ""CONSISTENT TERMINOLOGY""; ""LEVEE CERTIFICATION""; ""FLOODPLAIN MANAGEMENT""; ""1 The Corps and U.S. Flood Damage Reduction Planning, Policies, and Programs""; ""RISK ANALYSIS APPROACH""; ""THE CORPS'S WATER RESOURCES PROJECT PLANNING PROCEDURES""; ""From Principles and Standards to Principles and Guidelines""</p> <p>""U.S. FEDERAL FLOOD PREPAREDNESS, MITIGATION, AND RESPONSE ACTIVITIES"" ""The Galloway Report""; ""2 Decision Making and Communication Issues""; ""THE GOAL OF FLOODPLAIN MANAGEMENT""; ""MULTIPLE OBJECTIVES""; ""COMPARING PROJECT ALTERNATIVES""; ""FLOODPLAIN MANAGEMENT ALTERNATIVES""; ""RISK COMMUNICATION""; ""3 Risk Analysis Concepts and Terms""; ""UNCERTAINTY""; ""CONSISTENCY ACROSS PROGRAM AREAS""; ""RISK ANALYSIS AND DECISION MAKING""; ""4 Risk Analysis Techniques"";</p>

""CORPS FRAMEWORK""; ""NATURAL VARIABILITY AND IMPERFECT KNOWLEDGE""; ""RISK ANALYSIS""; ""MONTE CARLO SIMULATION"" ""ASSESSMENT OF ENGINEERING PERFORMANCE"" ""GEOTECHNICAL RELIABILITY""; ""5 Case Studies""; ""BEARGRASS CREEK""; ""Flood Damage Reduction Measures""; ""Damage Reaches""; ""Flood Hydrology""; ""Rainfall-Runoff Model""; ""Uncertainty in Flood Discharge""; ""River Hydraulics""; ""Uncertainty in Flood Stage""; ""Economic Analysis""; ""Uncertainty in Flood Damage""; ""Project Planning""; ""Evaluation of Project Alternatives""; ""Risk of Flooding""; ""Effect on Project Economics of Including Risk and Uncertainty"" ""RED RIVER OF THE NORTH AT EAST GRAND FORKS, MINNESOTA, AND GRAND FORKS, NORTH DAKOTA"" ""Risk Analysis""; ""Discharge-Frequency Relationships""; ""Elevation-Discharge Relationships""; ""Risk and Uncertainty Analysis Results""; ""Project Reliability""; ""6 Evaluation and Proposed Improvements""; ""CONCERNS WITH THE RISK ANALYSIS METHODS""; ""ENGINEERING PERFORMANCE""; ""Knowledge Uncertainty""; ""HYDROLOGIC ANALYSIS""; ""Parameter Uncertainty for the LP3 Distribution""; ""Neglecting Skew Uncertainty""; ""Errors in Flood Frequency Curves Derived from Rainfall-Runoff Modeling"" ""Errors in the Stage-Discharge Relationship"" ""GEOTECHNICAL RELIABILITY""; ""ECONOMIC PERFORMANCE""; ""INTERDEPENDENCE IN RISK ANALYSIS FOR FLOOD DAMAGE ASSESSMENT""; ""CORRELATION LENGTH""; ""SPATIAL AGGREGATION""; ""COMPUTATIONAL ALTERNATIVES TO MINIMIZE CORRELATION EFFECTS""; ""Determine the Scale of Randomization""; ""Introduce Correlation in Monte Carlo Simulation""; ""Randomize Structures Jointly""; ""Randomize Hydrology and Hydraulics for River Reaches""; ""Analyze Statistical Variability in Project Benefits Rather than Damage""; ""Statistically Compare Net Benefits from Alternative Plans""
