



# INSTITUTE FOR EARTH SYSTEM PRESERVATION (IESP) International Experts supporting a sustainable balance between Environment, Economy and Society

## **Newsletter**

## Book-Project: Sustainable Risk Management

Collection and review of the chapters is still an ongoing process. Peter Wilderer serves as editor-in-Chief. In the following we have the pleasure to inform you about the current state of titles of the contributions and organization of the book. By mid March 2017, we hope we can present the outline of the book and the chapters to the Springer book series on "Strategies for Sustainability".

## Chapters

#### Part 1: Fundamental Thoughts

eac Editor: Ortwin Renn

Risks, Side-Effects and Uncertain Knowledge: From Normative to Hypothetical Risks (tentative title) Booss

Risk Management from the Perspective of Catholic Social Ethics

VUK!

Distributed Responsibility in Risk Governance

Klinke & Renn

 ${\bf Economic\ Growth:\ Opportunity\ or\ Risk}$ 

von Hauff

Approaching Risk Management: General Perspectives on Handling Systemic Risks

Dorfrer & Straub

## Part 2: The Environmental and Ecological Dimension

Load Editor: Martin Grambow

Dialectics of Chances and Risks as Management Approach in Environmental Development (tentative title) Grambow and Korck

Maxims of Risk Ethics for Sustainable Agriculture

Gollwalc

Risk of sustainable water management under the threat of climate change: Towards the Nexus City Gondhakelar & Drewes

Risking Weather Engineering: Fiction or Contribution to Conflict Prevention?

Wilderer & Fluhrer

Contribution of Neurobiology to Decision Making and Generation of Motivation (tentative title)

Resilient Environment and Nature: Basis for Human Health (tentative title) Hildebrand:

### Part 3: The Medical Radiation Dimension

Lead Editor: Michael Molis

#### Overview

Belau et al.

The biological foundations of risks from ionizing radiation exposures:

How understanding associated effects will help their quantification and mitigation

Hiskie

The carcinogenic risk in radiation medicine

Trott

Benefit and Risks of Screening for Breast Cancer

Heywanger-Köbrunner

"Radiation effects" in patient treatment

Flentje

Risk Management in Radiation Medicine:

Administrative, legal and ethical aspects of research in radiation medicine in Germany

Nestle and Lukas

Dealing with risks in modern medicine, effective communication included

Peter

### Part 4: The Technical Dimension

Lead Editor: Klaus Mainzer

#### Overview

Rossmann and Hafner

Sustainable Risk Management in Business

Steger

Risking the Future of Automotive

Spiegelberg

The Smart City Concept: A review concerning sustainable risk-management

Kelnberger

Dark Clouds over the Digital World

Korhammer and Grambow jun.

## Research Project on "WaterFutureBavaria

Bavarian Ministry of Environment (StMUV) puts forward a major Bavarian research project WaterFutureBavaria (WasserZukunftBayern). Subject of this project is the complete modeling of the water situation in Bavaria. Hydromorphologic river processes and hydrologic surface processes are integrated into a high performance computing. Regional and countrywide water situations (flooding, draughts, erosion, irrigation) will be modeled and visualized.

The project is in an advanced state of approval. IESP will take part in this project as scientific advisory board.

## Workshop on "Efforts to Gain Agricultural Transformation"

IESP is preparing a workshop in 2017 on "Efforts to Gain Agricultural Transformation". We have a strong feeling that the present agricultural system is at stake. Agriculture and water are

in close interaction. Water scarcity and water quality are of major importance to agriculture. Vice versa agriculture can have major effects on water quality.

The workshop aims to investigate this interaction with Bavaria as an example. This also leads to a continued discussion of agricultural topics of overriding importance.

The discussion will touch four focus groups:

- Water-nature-soil
- Agricultural economics
- Quality of rural life
- Global interconnections

The workshop is planned to take place at Feldafing near Munich in fall 2017.