

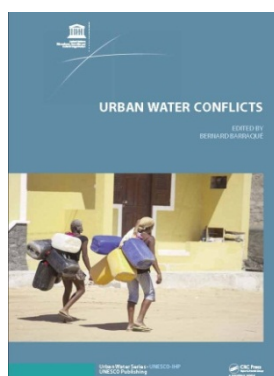
UNESCO
Natural Sciences
Catalogue of Publications
2012-2013



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Water Sciences



Urban Water Conflicts

Edited by Bernard Barraqué

ISBN: 978-92-3-104121-1

Published in 2012 by UNESCO and Taylor & Francis

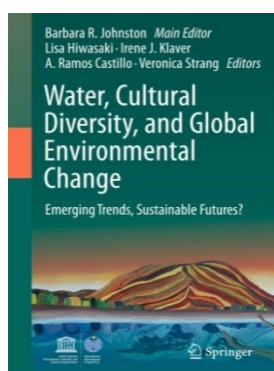
346 p., illus., ENG

Urban Water Conflicts – the output of a project by UNESCO's International Hydrological Programme on "Socioeconomic and Institutional Aspects in Urban Water Management" – presents a collection of essays on socioeconomic and institutional aspects of urban water management, focusing on water and sanitation services. The book examines interdisciplinary approaches to understanding and analyzing conflicts that arise from inadequate urban water management. Conflict analysis is addressed in some essays by taking into

account economic, environmental and social dimensions of sustainability. The issue of institutional conflicts between different levels of government is also discussed in some case studies.

The book is the 8th volume in the UNESCO-IHP Urban Water Series.

To order: http://publishing.unesco.org/details.aspx?Code_Livre=4889



Water, Cultural Diversity, and Global Environmental Change

Emerging Trends, Sustainable Futures?

Edited by Rose Johnston

ISBN: 978-602-98372-4-7

Published by Springer, 2012

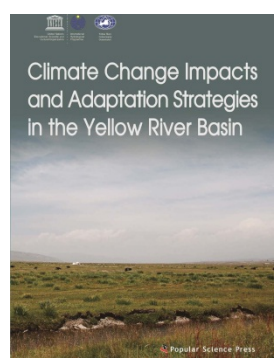
560 p., 195 illus., ENG

A product of the UNESCO-IHP project on Water and Cultural Diversity, this book represents an effort to examine the complex role water plays as a force in sustaining, maintaining, and threatening the viability of culturally diverse peoples. It is argued that water is a fundamental human need, a human right, and a core sustaining element in biodiversity and cultural diversity. The core concepts utilized in this book draw upon a larger trend in sustainability science, a

recognition of the synergism and analytical potential in utilizing a coupled biological and social systems analysis, as the functioning viability of nature is both sustained and threatened by humans.

<http://unesdoc.unesco.org/images/0021/002151/215119E.pdf>

To order: <http://www.springer.com/environment/aquatic+sciences/book/978-94-007-1773-2>



Climate Change Impacts and Adaptation Strategies in the Yellow River Basin

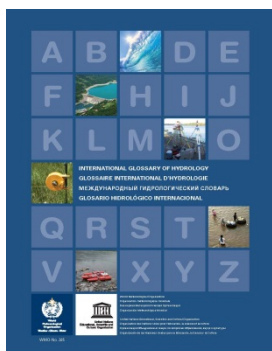
ISBN: 978-7-110-07579-1

Published by Popular Science Press, Beijing

308 p., illus., ENG

Under all six scenario studied by this project, there will be water shortages along the Yellow River by 2050. The project received funding from the MDG Achievement Fund.

<http://unesdoc.unesco.org/images/0021/002180/218026E.pdf>

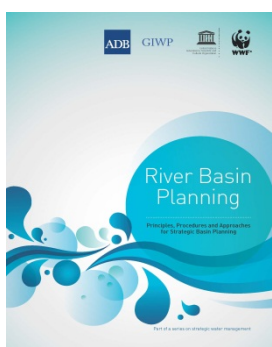


International Glossary of Hydrology

ISBN: 978-92-3-001154-3
 Published by UNESCO and WMO, 2012
 461 p., MLT

This is the 3rd edition of the multilingual (English, French, Russian and Spanish) UNESCO-WMO International Glossary of Hydrology.

<http://unesdoc.unesco.org/images/0022/002218/221862M.pdf>



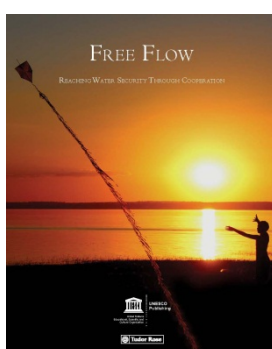
River basin planning: principles, procedures and approaches for strategic basin planning

ISBN: 978-92-3-001152-9
 Published by UNESCO, Asian Development Bank, GIWP and WWF-UK, 2013
 181 p., illus., maps, ENG

Growing competition for scarce water resources has driven major changes in the way river basin planning is undertaken. This has resulted in a shift away from 'technical' approaches designed to maximise water availability and led to more strategic approaches to basin planning. These approaches aim to optimise outcomes by reconciling the competing demands of different sectors of the economy, the natural environment, and society as a whole.

Drawing on experiences from around the world, this book distils best practice approaches to basin planning in large and complex basins and provides an overview of the emerging good practice. Part A includes discussion of the evolution of basin planning and provides a framework for strategic basin planning, including environmental planning. Part B describes some of the techniques involved in basin planning, including conducting a situation assessment, addressing uncertainty, techniques for identifying objectives and balancing trade-offs, and developing thematic plans.

<http://unesdoc.unesco.org/images/0022/002208/220866e.pdf>



Free Flow: reaching water security through cooperation

ISBN: 978-92-3-104256-0
 Published by UNESCO and Tudor Rose, 2013
 335 p., illus., maps, ENG

Water is an essential resource for mankind and our ecosystems. Free Flow is a fully illustrated book with over 100 authors' work on water management and cooperation at international, regional, national, municipal and local levels. Their commentaries draw upon experiences around the world, reflecting how people are changing their interaction with water to improve sustainable development. The publication reflects progresses and challenges in these fields, highlighting good practices in a wide variety of societies and disciplines. The book strives to

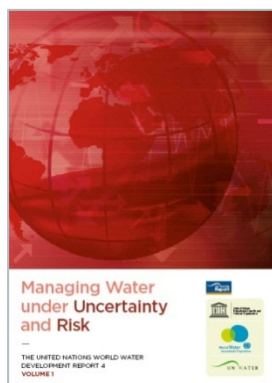
project experiences into future actions and encourages further institutional commitments to better understanding of and more effective management of water cooperation in order to achieve sustainable development.

<http://unesdoc.unesco.org/images/0022/002228/222893e.pdf>

To order: http://publishing.unesco.org/details.aspx?=&Code_Livre=4999&change=E

World Water Assessment Programme

World Water Development Report



Managing Water under Uncertainty and Risk

The United Nations World Water Development Report 4 (Set of 3 volumes)

ISBN: 978-92-3-104235-5

Published in 2012 by UNESCO

904 p., illus., photos, tables, maps, glossary and index, ENG

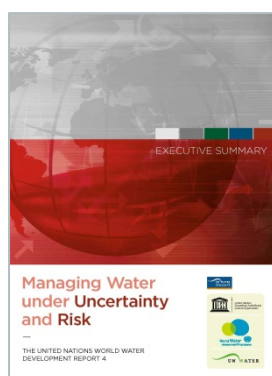
This flagship report is a comprehensive review that gives an overall picture of the world's freshwater resources. It analyses pressures from decisions that drive demand for water and affect its availability. It offers tools and response options to help leaders in government, the private sector and civil society address current and future challenges. It suggests ways in which institutions can be reformed and their behaviour modified, and explores possible sources of financing for the urgently needed investment in water.

The WWDR4 is a milestone within the WWDR series, introducing a thematic approach – 'Managing Water under Uncertainty and Risk' – in the context of a world which is changing faster than ever in often unforeseeable ways, with increasing uncertainties and risks. It highlights that historical experience will no longer be sufficient to approximate the relationship between the quantities of available water and shifting future demands. Like the earlier editions, the WWDR4 also contains country-level case studies describing the progress made in meeting water-related objectives.

The WWDR4 also seeks to show that water has a central role in all aspects of economic development and social welfare, and that concerted action via a collective approach of the water-using sectors is needed to ensure water's many benefits are maximized and shared equitably and that water-related development goals are achieved.

<http://unesdoc.unesco.org/images/0021/002156/215644e.pdf>

To order: http://publishing.unesco.org/details.aspx?&Code_Livre=4898&change=E



Managing Water under Uncertainty and Risk: Executive Summary

The United Nations World Water Development Report 4 Executive Summary

SC.2012/WS/8

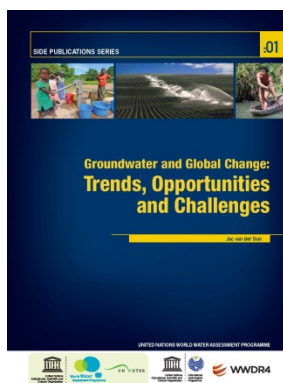
Published in 2012 by UNESCO

68, illus., maps, ENG

This Executive Summary is an encapsulated view of the key issues from the WWDR4, presented in the same chapter structure as for Volume 1 to assist orientation. It provides readers with a preview to the in-depth discussion and supporting material around these issues they can anticipate in the parent report, which can be viewed as a reference work.

<http://unesdoc.unesco.org/images/0021/002171/217175E.pdf>

WWDR Side Publications



Groundwater and global change: trends, opportunities and challenges

WWDR-4 Side Publications Series, 1

Author: Van der Gun, Jac

ISBN: 978-92-3-001049-2

Published by UNESCO, 2012

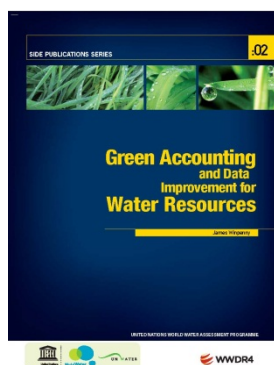
38 p., illus., incl. bibl., ENG

Groundwater and Global Change calls attention to groundwater, a resource poorly understood by the general public and most water opinion-leaders and decision-makers. It aims to enhance awareness of this resource and increase knowledge on how to better use and protect it, including taking optimal advantage of groundwater's unique buffer capacity, which may mitigate problems resulting from increasing demographic, economic, environmental and climate change pressures. The publication highlights the groundwater issues

that deserve to be taken into account in the international water agenda, and hopes to contribute to the correct understanding of these issues in order to improve decisions on programming and financing global water resources initiatives.

Groundwater and Global Change is an updated, extended and more extensively documented revisit of the Groundwater chapter that is presented as a special report in the United Nations World Water Development Report 4 (WWDR4).

<http://unesdoc.unesco.org/images/0021/002154/215496e.pdf>



Green Accounting and Data Improvement for Water Resources

WWDR-4 Side Publications Series, 2

Author: Wimpenny, James

ISBN: 978-92-3-001088-1

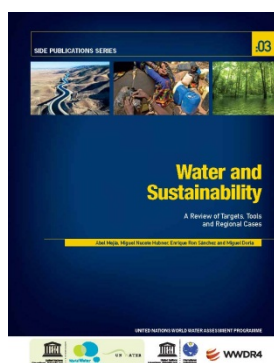
Published by UNESCO, 2012

8 p., illus., incl. bibl., ENG

Green Accounting and Data Improvement for Water Resources refers back to the United Nations World Water Development Report 4 (WWDR4) and its messages, offering a more substantial exploration of the green accounting theme. It outlines and discusses key initiatives by organizations such as the UN (SEEAW), Eurostat, the OECD and the EEA to incorporate water-related indicators into wider systems of environmental accounting as a step towards

raising the profile of water's role in economic and environmental policy-making. This report finally aims to inform the decision-making process for sustainable development and highlight to governments, development agents, civil society and the statistics community the crucial importance of hydrometeorological data collection, processing and dissemination.

<http://unesdoc.unesco.org/images/0021/002171/217165E.pdf>



Water and Sustainability: A Review of Targets, Tools and Regional Cases

WWDR-4 Side Publications Series, 3

Authors: Mejía, Abel; Nucete Hubner, Miguel; Ron Sánchez, Enrique; Doria, Miguel

ISBN: 978-92-3-001094-2

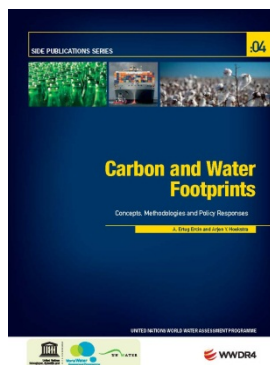
Published by UNESCO, 2012

48 p., incl. bibl., ENG

Water and Sustainability provides an overview of water sustainability targets and selected tools and approaches to assist decision-makers improve performance and achieve results, with a view to ultimately meeting development targets. Water and Sustainability focuses on three widely known systems of water sustainability targets: those set under the umbrella of the Millennium

Development Goals; those established as part of the European Union Water Framework Directive; and the target-setting process for the 6th World Water Forum. The report also presents five cases to highlight some of the current practices being followed to set water sustainability targets.

<http://unesdoc.unesco.org/images/0021/002171/217180E.pdf>



Carbon and Water Footprints: *Concepts, Methodologies and Policy Responses*

WWDR-4 Side Publications Series, 4

Authros : A. Ertug Ercin and Arjen Y. Hoekstra

ISBN: 978-92-3-001095-9

Published by UNESCO, 2012

25 p., illus., incl. bibl., ENG

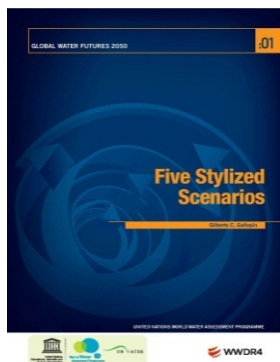
Carbon and Water Footprints first analyses the origins of the carbon and water footprints. It makes a detailed exploration of the similarities and differences of aspects such as definition, methods of measurement, spatiotemporal dimensions, components, and entities for which the footprints can be calculated.

Carbon and Water Footprints then discusses the two in terms of accounting and response strategies, investigating for example the setting of sustainable caps and targets for reduction, and the problematic rebound effect encountered with increasing efficiencies.

The aim of Carbon and Water Footprints is to draw lessons from each footprint which can help society as a whole build on the two concepts. It also seeks to help decision-makers recognize the need to fully evaluate the effectiveness of a 'solution' to one footprint before applying it to another and potentially creating unnecessary challenges in successfully tackling environmental problems.

<http://unesdoc.unesco.org/images/0021/002171/217181E.pdf>

World Water Scenarios

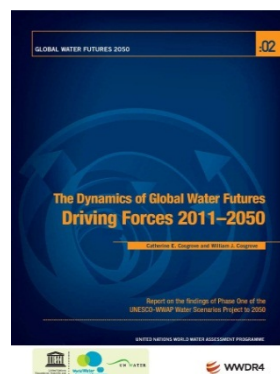


The Dynamics of Global Water Futures: Five Stylized Scenarios

Author: Gilberto C. Galopin
 Published by UNESCO, 2012
 16 p., illus., ENG
 ISBN: 978-92-3-001038-6

This report provides an initial exploration of long-range global water scenarios as a contribution to the fourth World Water Development Report (WWDR4). It is an original work based on research and surveys conducted among dozens of experts in water-related fields in 2010-2011. Rather than detailed descriptions, it offers qualitative summaries of possible futures as input to the deliberations of the Scenario Focus Group (SFG), the WWDR-4's collective of decision-makers, modelers, and scenario and sectoral experts.

<http://unesdoc.unesco.org/images/0021/002153/215380e.pdf>



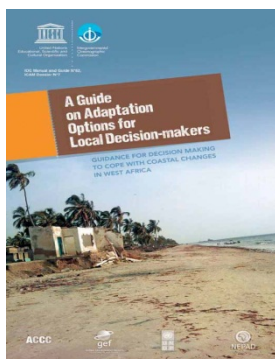
The Dynamics of Global Water Futures: Driving Forces 2011-2050

Authors: Cosgrove, Catherine E.; Cosgrove, William J.
 Published by UNESCO, 2012
 94 p., illus., incl. bibl., ENG
 ISBN: 978-92-3-001035-5

The report presents a summary of the findings of the first phase of the Scenarios process: an analysis of the evolution of 10 major external forces (drivers) that have direct and indirect consequences on water resources. A framework for the causal linkages between these driving forces and their impact on human well-being, equity and degree of poverty is presented. These findings show the possible range of future outcomes and the magnitude of the challenges we are facing in each driver's domain.

<http://unesdoc.unesco.org/images/0021/002153/215377e.pdf>

Oceanography



A Guide on adaptation options for local decision-makers

Guidance for decision making to cope with coastal changes in West Africa

Authors: Niang, Isabelle; Nai, George; Folorunsho, Regina; Diop, Mamadou; Sow, Mamadou; Trawally, Dodou; Faye, Serigne; Bihibindi, André; Diop, Ndiaga; Karibuhoye, Charlotte

Editors: Minielle Tall, Annie Bonnin Roncerel

Published by UNESCO/IOC, 2012

54 pp., illus., Incl. bibl., ENG, FRE, POR

IOC Manual and Guides, 62 (ICAM dossier, no. 7).

This guide is a collective work of the GEF Project on Coastal Adaptation in West Africa (ACCC) based on practical examples that provides local communities and their policymakers for the most appropriate techniques and lasting solutions to the impacts of climate change threatening the survival of their communities and the attractiveness of their areas. In 10 fact sheets summarizing national experts' experiences from The Gambia, Ghana, Mauritania, Nigeria and Senegal, the manual describes technical characteristics of major engineering and integrated resource management options, including monitoring and maintenance requirements, presented in a cost and benefit analysis.

<http://unesdoc.unesco.org/images/0021/002166/216603e.pdf> (ENG)

Guide sur les options d'adaptation en zones côtières à l'attention des décideurs locaux – Aide à la prise de décision pour faire face aux changements côtiers en Afrique de l'Ouest

<http://unesdoc.unesco.org/images/0021/002166/216603f.pdf> (FRE)

Guia de opções de adaptação a atenção dos decisores locais – Guia para tomada de decisões de forma a lidar com as mudanças costeiras na África Ocidental

<http://unesdoc.unesco.org/images/0021/002166/216603por.pdf> (POR)



Coastal Management Approaches for Sea Level Related Hazards Case Studies and Good Practices

Published by UNESCO/IOC, 2012

54 pp., illus., ENG

IOC Manuals and Guides, 61

The manual was prepared by the Tsunami Information Centre for the North-Eastern Atlantic, the Mediterranean and Connected Seas (NEAMTIC). It provides guidance in identifying, sharing, and disseminating good practices in plans, methods and procedures to strengthen preparedness for sea-level related hazards, including mitigation through Integrated Coastal Area Management (ICAM). It includes case-studies (positive and negative ones) from Member States in the region illustrating existing management approaches, and recommendations for enhancing coastal communities' awareness of, and preparedness for, sea-level related hazards. The manual concludes by a set of recommendations.

<http://unesdoc.unesco.org/images/0022/002203/220397E.pdf>



Manual on sea level measurement and interpretation, Vol. IV
An Update to 2006

Arabic version

Published by UNESCO/IOC, 2012

87 pp., illus., Incl. bibl., ARA, ENG (2006)

IOC Manual and Guides, 14 Vol. IV (JCOMM technical report, no. 31)
(WMO/TD, no. 1339).

The Arabic version of the fourth manual in the series of IOC Manuals on Sea Level Measurement and Interpretation provides the basic sets of information for people intending to install and operate tide gauges. The volume is largely concerned with tide gauge and data communications technologies and aimed at people who work in those fields. These are rapidly developing topics, and ones in which the sharing of expertise among groups is essential. In this view the translation of the manual into Arabic is a major achievement and was made possible under the UNESCO-Oman Self Benefiting Cooperation Project for the development of the Oman National Multi-Hazard Early Warning System.

<http://unesdoc.unesco.org/images/0014/001477/147773a.pdf>



Japan/UNESCO/UNU International Symposium (on) The Great East Japan Tsunami and Tsunami Warning Systems
Policy Perspectives; Summary statements

Published by UNESCO/IOC, 2012

8 pp., photo ENG, FRE, SPA

IOC Brochure (IOC/BRO/2012/1)

The Great East Japan Earthquake and Tsunami on 11 March 2011 resulted in the loss of about 19,000 lives. Coming from 25 countries, 290 physical and social scientists, warning system operators, emergency and response managers, planners, journalists, policy- and decision-makers attended the Japan –

UNESCO – UNU Symposium on The Great East Japan Tsunami on 11 March 2011 and Tsunami Warning Systems: Policy Perspectives from 16–17 February 2012 in Tokyo. The publication summarizes the findings of the symposium dedicated to all the victims of the natural disaster, in particular the lessons learned and the policy implications.

<http://unesdoc.unesco.org/images/0021/002160/216072e.pdf> (ENG)

<http://unesdoc.unesco.org/images/0021/002160/216072f.pdf> (FRE)

<http://unesdoc.unesco.org/images/0021/002160/216072s.pdf> (SPA)



En quelques minutes, la première vague déferle

Survivre aux tsunamis: l'Indonésie livre ses enseignements

French version produced by UNESCO-IOC in 2012

36 pp., photo, Incl. bibl., FRE

Brochure de la COI (IOC/BRO/2010/4)

The brochure was initially issued in Bahasa Indonesia (“Selamat dari bencana tsunami”) in 2009 and English in 2010. Illustrated brochure that through personal experiences from past tsunamis offers public knowledge, natural warnings and evacuation people strategies that helped people live through fast-arriving tsunamis in Aceh and southern Java. A reading-friendly document intended for anyone interested in natural hazards.

<http://unesdoc.unesco.org/images/0018/001898/189842f.pdf> (FRE)



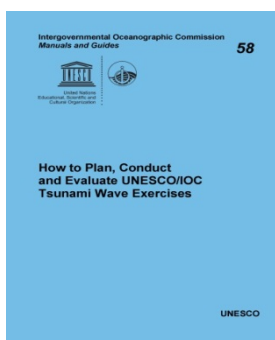
Tsunami: The Great Waves

Published by UNESCO/IOC, 2012.
16 pp. Illus., photos, ENG, FRE
IOC Brochure IOC/BRO/2012/4, second revised edition

Illustrated brochure in plain language created after the 2004 Indian Ocean tsunami with the purpose of increasing awareness and scientific knowledge about tsunamis. In this second revised edition, the reader will find information about the origin of a tsunami, the preventive measures to save his/her life during and after a tsunami, as well as information about tsunami warning centres in place and tsunami research activities. A reading-friendly document intended for anyone interested in natural hazards.

<http://unesdoc.unesco.org/images/0014/001486/148609e.pdf> (ENG)

<http://unesdoc.unesco.org/images/0014/001486/148609f.pdf> (FRE)



How to Plan, Conduct and Evaluate UNESCO/IOC Tsunami Wave Exercises

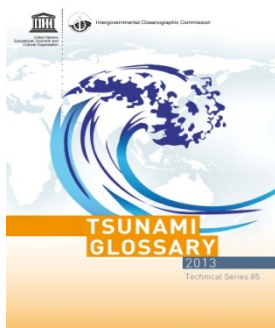
Published by UNESCO/IOC, 2013
95 pp., ENG, SPA
IOC Manuals and Guides, 58 rev.

Guideline prepared as one of the activities of Task Team 2 (Disaster Management and Preparedness) of the UNESCO/IOC Working Group on Tsunamis and Other Hazards Related to Sea-Level Warning and Mitigation Systems (TOWS). It is aimed to provide a set of generic advice for Tsunami Wave exercises development, management and evaluation in the context of the different UNESCO/IOC regional tsunami warning systems. It is intended for exercise coordinators, exercise players, disaster management agencies, as well as for all regional Intergovernmental Coordination Groups (ICGs) for tsunami warning systems.

<http://unesdoc.unesco.org/images/0021/002189/218967e.pdf> (ENG)

Directrices para planificar, realizar y evaluar ejercicios sobre tsunamis de la Comisión Oceanográfica Intergubernamental de la UNESCO

<http://unesdoc.unesco.org/images/0021/002189/218967s.pdf> (SPA)



Tsunami Glossary

Published by UNESCO/IOC, 2013
36 pp., photo, Incl. bibl., ENG, ARA, SPA, FRE
IOC Technical Series, 85 rev.

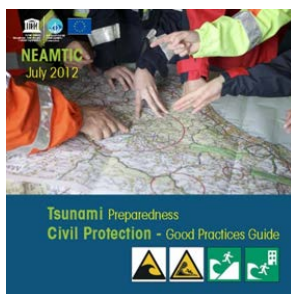
The technical report intends to be the main instrument for the implementation and standardization of general and specific tsunami terminology and classification. It is serving as a reference document for scientific experts that builds a linguistics global framework of scientific knowledge using a standardize language. This new edition is an update to the 2008 issue. Additional language versions are in preparation with the kind support of IOC Member States.

<http://unesdoc.unesco.org/images/0018/001882/188226e.pdf> (ENG)

<http://unesdoc.unesco.org/images/0018/001882/188226a.pdf> (ARA)

<http://unesdoc.unesco.org/images/0018/001882/188226s.pdf> (SPA)

<http://unesdoc.unesco.org/images/0018/001882/188226f.pdf> (FRE)

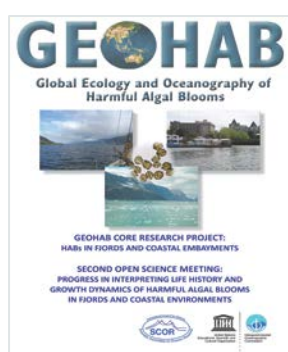


Tsunami Preparedness Civil Protection: Good Practice Guide

Published by UNESCO/IOC and produced with the support of the European Commission Directorate General for Humanitarian Aid & Civil Protection. Manuals and Guides, No.65, English only, 64 pp.

This manual is primarily developed for Civil Protection authorities in the Mediterranean and the North-Eastern Atlantic and connected seas region. A group of guidelines is summarized and proposed to help civil protection authorities and coastal communities understand their exposure to tsunami hazards and to mitigate the resulting risk through awareness, preparedness information and land use planning.

<http://unesdoc.unesco.org/images/0022/002207/220723e.pdf>

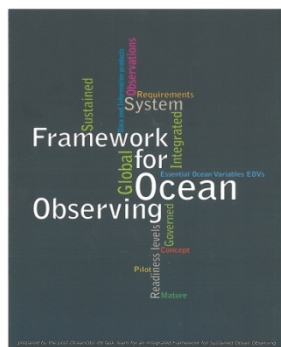


Harmful Algal Blooms in Fjords and Coastal Embayments

By Roy, S.; Pospelova, V.; Montresor, M.; Cembella, A. (Editors).
Published by UNESCO/IOC and SCOR, 2013
53 pp, photos, ENG
GEOHAB Report, 10; ISSN: 1538 182X.

This Report presents the major outcomes of the 2nd Open Science Meeting “Progress in Interpreting Life History and Growth Dynamics of Harmful Algal Blooms” organized to discuss and synthesize research efforts on various aspects of harmful algal blooms (HABs), and to plan future collaborative activities after the end of the Global Ecology and Oceanography of Harmful Algal Blooms (GEOHAB) programme in December 2013.

<http://unesdoc.unesco.org/images/0021/002198/219833e.pdf>

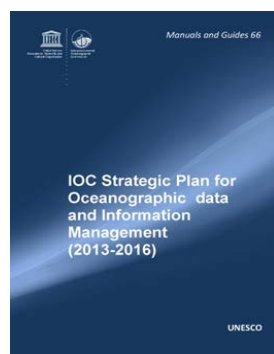


A Framework for Ocean Observing

By Lindstrom, Eric; Gunn, John; Fischer, Albert; McCurdy, Andrea; Glover, L.K. (Editors).
Published by UNESCO/IOC, 2013
28 pp., ENG
Information document IOC/INF-1284.

The report lays the basis of a governance model to optimize collaboration and integration across the many observing system elements and communities for the next 10 years.

<http://unesdoc.unesco.org/images/0021/002112/211260e.pdf>



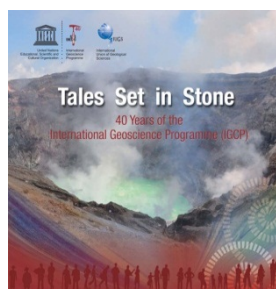
IOC Strategic Plan for Oceanographic data and Information Management (2013-2016)

Published by UNESCO/IOC, 2013
Manuals and Guides No 66. Multilingual (ENG, FRE, RUS, SPA), 54 pp.

The IOC Oceanographic Data Exchange Policy adopted in 2003 is central to the concept of delivering a data and information service for the “global ocean commons”. The strategic plan detailed in this manual provides standard and best practice in sharing, accessing and evaluating oceanographic data and information under agreed governance criteria within the UNESCO/IOC Oceanographic Data Exchange Policy.

<http://unesdoc.unesco.org/images/0022/002230/223030M.pdf>

Ecological and Earth Sciences



Tales Set in Stone

40 years of the International Geoscience Programme (IGCP)

Edited by E. Derbyshire

Published by UNESCO, 2012

140 p., illus, ENG

ISBN: 978-92-3-001036-2 (ENG)

ISBN: 978-92-3-001041-6 (FRE)

ISBN: 978-92-3-001042-3 (SPA)

This volume celebrates the 40th Anniversary of the International Geosciences Programme (IGCP) with a selection of the Tales Set in Stone drawn from examples of excellent IGCP projects which were conducted since its inception in 1972.

<http://unesdoc.unesco.org/images/0021/002152/215219e.pdf>

<http://unesdoc.unesco.org/images/0021/002152/215284f.pdf>

<http://unesdoc.unesco.org/images/0021/002158/215849s.pdf>



Identificación de prioridades para la gestión nacional de las especies exóticas invasoras

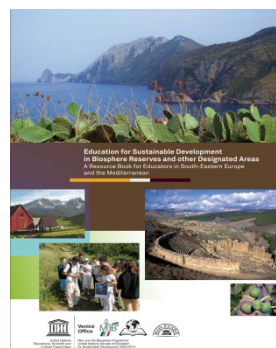
Published by UNESCO, 2012

ISBN: 978-92-9089-189-5

99 p., SPA

Invasive alien species (IAS) are globally recognized as one of the most serious threats to the environment, economy and society. Its impact can be seen on the biodiversity, in the provision of goods and services and in trade and human health. Since 2007 Uruguay has established the National Committee for drafting the National Strategy for the IAS. The Committee produced a database on the IAS and has been conducting workshops to discuss the importance and impact of the IAS on the country's environment, health, economy and production areas. This publication summarizes lectures and discussions held during the workshop organized in 2011 with the objective of identifying national priorities for the development of an action plan for the management of the IAS.

<http://unesdoc.unesco.org/images/0022/002253/225306S.pdf>



Education for Sustainable Development in Biosphere Reserves and other Designated Areas

A Resource Book for Educators in South-Eastern Europe and the Mediterranean

Authors: Michael Scoullou, Vassilis Kouroutos, Bessy Mantzara, Iro Alampeï, Vicky Malotidi, Vassilis Psallidas

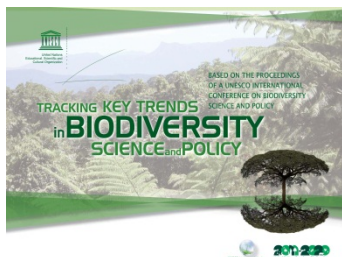
Published by UNESCO, 2013

258 p., illus., ENG

ISBN: 978-92-3-001120-8

This Resource Book is the result of a large team work that has the ambition to effectively promote Education for Sustainable Development (ESD) in the field and in particular in Biosphere Reserves (BRs) of the Man and the Biosphere (MAB) programme of UNESCO, as well as in other designated areas that share some fundamental features with MAB BRs. It aims to increase the capacities of those trainers and educators seeking to design and implement innovative educational projects, using Biosphere Reserves and other designated areas as authentic "ESD laboratories".

<http://unesdoc.unesco.org/images/0021/002199/219946e.pdf>



Tracking Key Trends in Biodiversity Science and Policy

Published by UNESCO, 2013
 156 p., illus., ENG/FRE
 ISBN: 978-92-3-001118-5

This book, based on the proceeding of the UNESCO 2010 International conference on Biodiversity Science and Policy, unfolds five following themes: (i) The Biodiversity Knowledge Base: Taxonomy Today and Tomorrow for Environmental Sustainability and Human Well-being; (ii) Conservation Biogeography: Integrating Biogeography and Conservation Science in a Changing World; (iii) Priority-setting in Biodiversity Conservation: Strengthening Site-scale Approaches; (iv) Communication, Education and Public Awareness; (v) Mainstreaming Biodiversity into Policy-Making: Towards a Biodiversity Science Policy.

<http://unesdoc.unesco.org/images/0022/002205/220530E.pdf>



Delta del Paraná: Historia, Presente y Futuro

Volume 1: Conferencias, Paneles y Trabajos Científico-Técnicos (resúmenes)

Published by UNESCO, 2013
 146 p., illus., SPA
 ISBN: 978-92-9089-193-2

Proceedings of the 1st Scientific and Academic Symposium of the Delta del Paraná Biosphere Reserve (DPBR) held in San Fernando, Argentina, 4-5 October 2010.

<http://unesdoc.unesco.org/images/0022/002270/227090s.pdf>



World Network of Biosphere Reserves 2012-2013

Published by UNESCO, 2012
 ENG/FRE/SPA

The 2012-2013 map of the World Network of Biosphere Reserves shows the worldwide distribution of the 610 biosphere reserves located in 117 countries, including 12 transboundary/transcontinental sites. The map is available in English, French and Spanish, and also includes an overview of the objectives, tasks and structures of these areas.

<http://unesdoc.unesco.org/images/0022/002205/220544M.pdf>



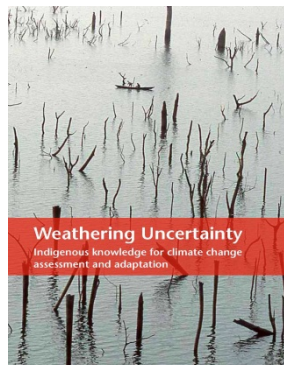
World Network of Biosphere Reserves 2013-2014

Published by the German National Commission for UNESCO, 2013
 ENG/FRE/SPA/GEM

The new 2013-2014 map of the World Network of Biosphere Reserves shows the worldwide distribution of the 621 biosphere reserves located in 117 countries, including 12 transboundary/transcontinental sites. The map is available in English, French, Spanish, and German and also includes an overview of the objectives, tasks and structures of these areas.

<http://unesdoc.unesco.org/images/0022/002229/222915M.pdf>

Local and Indigenous knowledge



Weathering Uncertainty

Traditional knowledge for climate change assessment and adaptation

Authors: D. Nakashima, K. Galloway McLean, H. Thulstrup, A. Ramos Castillo, J. Rubis

ISBN: 97892-3-001068-3

Published in 2012 by UNESCO

120 p., incl. bibl., ENG

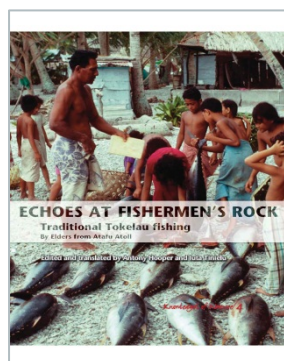
This unique resource draws attention to a rapidly growing scientific literature on the contribution of indigenous and traditional knowledge to understanding climate change vulnerability, resilience and adaptation. It broadens the awareness and understanding of these knowledge systems by climate change scientists and decision-makers, including Authors and Reviewers of the

forthcoming Fifth Assessment Report (AR) of the Intergovernmental Panel on Climate Change (IPCC). Co-published by UNESCO and UNU, the volume references 280 publications from the scientific literature (peer-reviewed and grey).

<http://unesdoc.unesco.org/images/0021/002166/216613E.pdf>

Executive Summary & Conclusion / Résumé executive & conclusion / Resumen Ejecutivo & Conclusión

<http://unesdoc.unesco.org/images/0021/002175/217502m.pdf>



Echoes at Fishermen's Rock – Traditional Tokelau Fishing

Knowledge of Nature series – 4

Elders from Atafu Atoll

Edited by A. Hooper and I. Tinielu.

ISBN: 978-92-3-001032-4

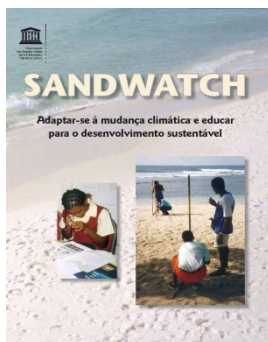
Published in 2012 by UNESCO

120p., illus., ENG

“Echoes at Fishermen's Rock – Traditional Tokelau Fishing” is a straightforward manual on the traditional techniques for the capture of crabs, bird and especially fish of the lagoon, the reef and the open ocean of Tokelau. As such, it introduces the various species and thus the rich biodiversity of the small Pacific island country. For each technique, the manual gives detailed

information on the relevant traditional protocols, fish behaviours, the winds, currents and lunar cycles as well as seasonal variations indicated by the annual rising of named stars and constellations that affect traditional fishing in Tokelau. The original version was published in 2008 under the Tokelauan title “Hikuleo i te Papa o Tautai”.

<http://unesdoc.unesco.org/images/0021/002184/218436E.pdf>



Guardarenas Sandwatch: adaptarse al cambio climático y educar para el desarrollo sostenible

Authors: Gillian Cambers and Paul Diamond

ISBN: 978-92-3-304179-0 (SPA)

ISBN: 978-92-3-001099-7 (POR)

147 p., illus., incl. bibl.

This is a new translation of the Sandwatch manual entitled "Sandwatch: Adapting to Climate Change and Educating for Sustainable Development" in Spanish and Portuguese. The first edition in English and French was published in 2010. The manual is the main reference for participation in the Sandwatch methodology and contains a range of activities on beach monitoring and climate change adaptation. The Sandwatch project, in brief, provides a framework for children, youth and adults in schools and local communities to collectively and critically evaluate the challenges facing their coastal environments and try to find sustainable solutions and measures to address them, including local adaptation to climate change.

<http://unesdoc.unesco.org/images/0021/002164/216478s.pdf> (SPA)

Sandwatch: Adaptar-se à mudança climática e educar para o desenvolvimento sustentável

<http://unesdoc.unesco.org/images/0021/002183/218344por.pdf> (POR)

Science Policy, Technology and Innovation



Inovação tecnológica na saúde

Edição 2012 do Prêmio MERCOSUL de Ciência e Tecnologia

ISBN: 978-85-7652-173-0

Published by in 2012 UNESCO

208 p., POR

The incorporation of the advancements of Science and the Technology to the daily life must contribute directly to the improvement of the life conditions of the population. Lined up to this thought, MERCOSUR Award for Science and Technology 2012 chose as theme the Technological innovations applied to the improvement of services to the people. The subject of this year is Technological innovation in health, understanding as innovation the significant improvement of products or processes in this in case applied to health. Works of “technological Innovation in the health” had been considered those related with prevention, treatment, development of vaccines, diagnostics, sanitary measures and new biomedical and pharmaceutical technologies for relevant diseases considered in the South American region. This book presents the winning works of all the categories of the Prize.

<http://unesdoc.unesco.org/images/0021/002181/218165M.pdf>



Dia Mundial da Ciência pela Paz e pelo Desenvolvimento, 10 de novembro:

Qual é a melhor fonte de energia para o nosso futuro?; trabalhos e desenhos premiados 2012

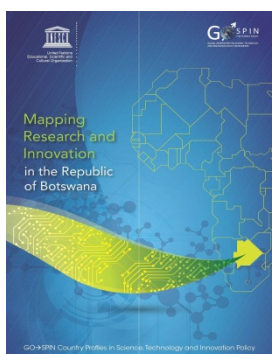
Ref. nr: BR/2012/PI/H/14

Published in 2012 by UNESCO

184 p., POR

UNESCO Brasilia Office Natural Sciences Sector launched on 18 June 2012 an “Essay and Drawing Contest for Students” to celebrate the United Nations “World Science Day for Peace and Development” on 10 November. Secondary school students from all over Brazil were asked to write essays, oriented by teachers, and draw pictures to answer the question “What is the best source of energy for our future?” This book contains the best ten pictures, as well as the best ten essays. The Contest award ceremony was held on 10 November 2012 in São Paulo.

<http://unesdoc.unesco.org/images/0021/002183/218372POR.pdf>



Mapping Research and Innovation in the Republic of Botswana

ISBN: 978-92-3-001219-9

Published by UNESCO, 2013

113 p., incl. bibl.

The first volume in UNESCO’s new online series of GO→SPIN Country Profiles in Science, Technology and Innovation Policy is dedicated to the research and innovation landscape of Botswana. GO→SPIN is helping Member States to monitor and evaluate their performance in science, engineering, technology and innovation, via a standard methodology for analysing policies, legal frameworks, operational policy instruments and a series of indicators. The study includes different inventories of the various components of their national innovation system. This monitoring tool has been designed to help countries reform and upgrade their national science and innovation systems and governance.

<http://unesdoc.unesco.org/images/0022/002247/224725E.pdf>

Periodical



A World of Science

ISSN 1815-9537

Published by UNESCO

Editor: Susan Schneegans

A World of Science is an on-line periodical which is published quarterly in English, French and Spanish and covers a wide variety of scientific areas of topical interest and of relevance to UNESCO's programmes in science.

Volume10, No 1, January-March 2012

Biodiversity, geoparks, groundwater governance, drought in Horn of Africa, science education in Asia, etc.

<http://unesdoc.unesco.org/images/0021/002150/215081E.pdf> (ENG)

<http://unesdoc.unesco.org/images/0021/002150/215081f.pdf> (FRE)

<http://unesdoc.unesco.org/images/0021/002150/215081s.pdf> (SPA)

Volume10, No 2, April-June 2012

WWDR-4, UNESCO-L'Oréal laureates, Sandwatch project in Kenya, Mujib biosphere reserve, sea level rise, etc.

<http://unesdoc.unesco.org/images/0021/002156/215616E.pdf> (ENG)

<http://unesdoc.unesco.org/images/0021/002156/215616F.pdf> (FRE)

<http://unesdoc.unesco.org/images/0021/002156/215616S.pdf> (SPA)

Volume 10, No 3, July-September 2012

How human societies and ecosystems coped with natural disasters and climate change in the past, why some civilizations failed and what contemporary societies can learn. A second story profiles China's geoparks. Also in this issue: an interview of the President of the Israel Academy of Sciences and Humanities, news of Rio+20 and the new secretariat for the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES).

<http://unesdoc.unesco.org/images/0021/002171/217154E.pdf> (ENG)

<http://unesdoc.unesco.org/images/0021/002171/217154F.pdf> (FRE)

<http://unesdoc.unesco.org/images/0021/002171/217154S.pdf> (SPA)

Volume 10, No 4, October-December 2012

Marine biodiversity; digital libraries in Arica; Human Variome Project; interview with Hayat Sindi, first woman from Gulf to obtain a PhD in biotechnology; etc.

<http://unesdoc.unesco.org/images/0021/002180/218053E.pdf> (ENG)

<http://unesdoc.unesco.org/images/0021/002180/218053S.pdf> (SPA)

Volume 11, No 1, January-March 2013

International Year of Water Cooperation; managing conflict and cooperation over water; synthetic biology; preserving the memory of the world; getting out of debt.

<http://unesdoc.unesco.org/images/0021/002191/219156E.pdf> (ENG)

<http://unesdoc.unesco.org/images/0021/002191/219156F.pdf> (FRE)

<http://unesdoc.unesco.org/images/0021/002191/219156S.pdf> (SPA)

Volume 11, No 2, April-June 2013

Groundwater management; how mobile phones and Internet are remodelling development approaches in Uganda; improving to the dwellings of Maasai women in a rural village; etc.

<http://unesdoc.unesco.org/images/0022/002207/220723E.pdf> (ENG)

Volume 11, No 3, July-September 2013

Memory of the Earth: geoparks; young engineers develop new ideas for the sustainable aviation industry of the future; networking on the Nile; UNESCO is going Open Access; etc.

<http://unesdoc.unesco.org/images/0022/002217/221776E.pdf> (ENG)

Volume 11, No 4, October-December 2013

60 years since the discovery of the molecular structure of DNA; Cape Horn - the southernmost biosphere reserve in the world; the state of vegetation in Qatar; strategic ground water reserves in Kenya; etc.

<http://unesdoc.unesco.org/images/0022/002236/223628E.pdf> (ENG)