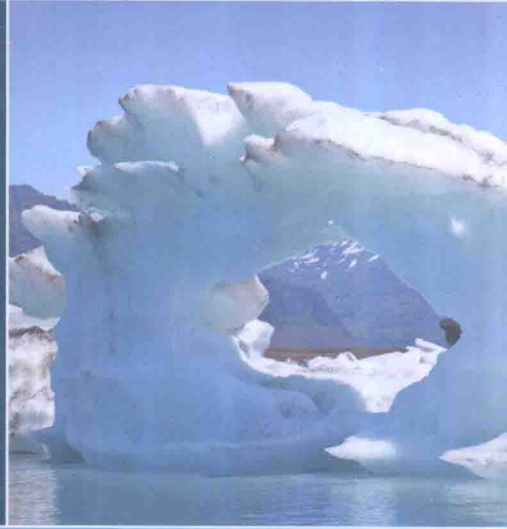




POLAR OCEANS GOVERNANCE IN AN ERA OF ENVIRONMENTAL CHANGE



Edited by Tim Stephens and David L. VanderZwaag

NEW HORIZONS IN ENVIRONMENTAL AND ENERGY LAW

Polar Oceans Governance in an Era of Environmental Change

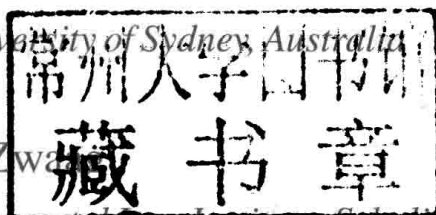
Edited by

Tim Stephens

Faculty of Law, University of Sydney, Australia

David L. VanderZwaag

*Marine and Environmental Law Institute, Schulich School of
Law, Dalhousie University, Canada*



NEW HORIZONS IN ENVIRONMENTAL AND ENERGY LAW

Edward Elgar

Cheltenham, UK • Northampton, MA, USA

© The Editors and Contributors Severally 2014

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical or photocopying, recording, or otherwise without the prior permission of the publisher.

Published by
Edward Elgar Publishing Limited
The Lypiatts
15 Lansdown Road
Cheltenham
Glos GL50 2JA
UK

Edward Elgar Publishing, Inc.
William Pratt House
9 Dewey Court
Northampton
Massachusetts 01060
USA

A catalogue record for this book
is available from the British Library

Library of Congress Control Number: 2013954346

This book is available electronically in the ElgarOnline.com Law Subject
Collection, E-ISBN 978 1 78195 545 1



ISBN 978 1 78195 544 4

Typeset by Columns Design XML Ltd, Reading
Printed and bound in Great Britain by T.J. International Ltd, Padstow

Polar Oceans Governance in an Era of Environmental Change

NEW HORIZONS IN ENVIRONMENTAL AND ENERGY LAW

Series Editors: Kurt Deketelaere, *Professor of Law, University of Leuven, Belgium and University of Dundee, Scotland* and Zen Makuch, *Reader in Law, Barrister, Imperial College, London, UK*

Environmental law – including the pressing considerations of energy law and climate change – is an increasingly important area of legal research and practice. Given the growing interdependence of global society and the significant steps being made towards environmental protection and energy efficiency, there are few people untouched by environmental and energy lawmaking processes.

At the same time, environmental and energy law is at a crossroads. The command and control methodology that evolved in the 1960s and 1970s for air, land and water protection may have reached the limit of its environmental protection achievements. New life needs to be injected into our environmental protection regimes – perhaps through the concept of sustainability in its environmental, economic and social forms. The same goes for energy policy and law, where liberalisation, environmental protection and security of supply are at the centre of attention. This important series seeks to press forward the boundaries of environmental and energy law through innovative research into environmental and energy law, doctrine and case law. Adopting a wide interpretation of environmental and energy law, it includes contributions from both leading and emerging international scholars.

Titles in the series include:

Energy for the 21st Century
Opportunities and Challenges for Liquefied Natural Gas (LNG)
Susan L. Sakmar

Emissions Trading Design
A Critical Overview
Stefan E. Weishaar

EU Environmental Legislation
Legal Perspectives on Regulatory Strategies
Edited by Marjan Peeters and Rosa Uylenburg

Polar Oceans Governance in an Era of Environmental Change
Edited by Tim Stephens and David L. VanderZwaag

The Fragmentation of Global Climate Governance
Consequences and Management of Regime Interactions
Harro van Asselt

Contributors

Ruth Davis is a lecturer in law at the University of Wollongong, Australia, and member of the Australian National Centre for Ocean Resources and Security (ANCORS). Her research interests include the international legal regime for the conservation and management of Antarctica and the Southern Ocean. Ruth is co-author (with D.R. Rothwell, S.B. Kaye and A. Akhtarkhavari) of *International Law: Cases and Materials with Australian Perspectives* (2nd edn., 2014).

Meinhard Doelle is a Professor of Law and Associate Dean Research at the Schulich School of Law, Dalhousie University, Canada. He is Director of the Marine and Environmental Law Institute, and co-editor of the *Journal of Environmental Law and Practice*. His research interests include climate change, environmental governance and environmental impact assessment processes.

Marcus Haward is a Professor in the Oceans and Antarctic Governance Program, Institute for Marine and Antarctic Studies (IMAS), University of Tasmania, Australia. Marcus has an extensive record of research and publication on Antarctic and oceans policy and governance from both global and Australian perspectives.

Rob Huebert is an Associate Professor in the Department of Political Science, University of Calgary, Canada, and Associate Director of the Centre for Military and Strategic Studies. In 2010, he was appointed as a Director of the Canadian Polar Commission. His research interests include international relations, strategic studies, the law of the sea, maritime affairs, Canadian foreign and defence policy, and circumpolar relations. He publishes on the issue of Canadian Arctic security, Maritime security and Canadian defence. His most recent book, written with Whitney Lackenbauer and Franklyn Griffiths, is *Canada and the Changing Arctic: Sovereignty, Security, and Stewardship* (2011).

Julia Jabour is leader of the Oceans and Antarctic Governance Program, Institute for Marine and Antarctic Studies, University of Tasmania, Australia. She has written and lectured on polar law and policy for 20

years and has taught in Australia, Malaysia, Iceland and New Zealand. Julia has visited Antarctica six times and has been a delegate to three Antarctic Treaty Consultative Meetings. Her current research includes an examination of the 'deep rules' embedded in the Antarctic Treaty System.

Rizal Abdul Kadir obtained his Doctorate in Juridical Studies from the University of Sydney, Australia, with his doctoral thesis on 'Joint Development and The Law of the Sea'. Immediately before commencing his doctoral studies he was a Research Fellow at the Maritime Institute of Malaysia. His research interests are in public international law, international relations and the law of the sea.

Lorne Kriwoken is a Senior Lecturer, School of Geography and Environmental Studies, University of Tasmania, Australia. He teaches and researches in the fields of wilderness and natural area management, environmental change and biodiversity conservation, with a particular focus on the Antarctic.

Suzanne Lalonde is a Professor of International Law at the Faculty of Law, University of Montreal and a Research Associate with the ArcticNet network of excellence in Canada. Her research focuses on core international legal principles, especially those pertaining to sovereignty and the determination of boundaries on land and at sea, with a particular emphasis on the Arctic.

David Leary is a Senior Lecturer in the Faculty of Law, University of Technology, Sydney, Australia. His research interests include resource exploitation in the Arctic and Antarctica, the law of the sea, biotechnology and renewable energy.

Ted L. McDorman is a Professor at the Faculty of Law, University of Victoria, Canada. He has written widely on ocean law and policy, with over 120 publications in the field. Since 2000, he has been editor-in-chief of *Ocean Development and International Law*. From 2002–2004 and 2011–2013, he was the 'academic-in-residence' at the Bureau of Legal Affairs, Canadian Department of Foreign Affairs and International Trade. In 2007, he was the Fulbright Visiting Chair in Canada–US Relations at the Woodrow Wilson International Center for Scholars in Washington D.C.

Rosemary Rayfuse is Professor of International Law, Faculty of Law, University of New South Wales Australia, and Conjoint Professor of International Environmental Law, Faculty of Law, Lund University, Sweden. Her research interests include the law of the sea and oceans governance in areas beyond national jurisdiction, international fisheries

law, the normative aspects of climate change, and the international legal framework for the regulation of novel and emerging technologies.

Donald R. Rothwell is Professor of International Law, and Head of School at the ANU College of Law, Australian National University, Australia. His research has a specific focus on law of the sea, law of the polar regions and implementation of international law within Australia. He is currently Rapporteur of the International Law Association (ILA) Committee on Baselines under the International Law of the Sea.

Tim Stephens is an Associate Professor and Associate Dean (Post-graduate Coursework) at the Faculty of Law at the University of Sydney. He teaches and researches in international law, the law of the sea and international environmental law. He is the author with D. R. Rothwell of *The International Law of the Sea* (2010, reprinted 2011).

David L. VanderZwaag is Professor of Law and Canada Research Chair in Ocean Law and Governance at the Marine and Environmental Law Institute, Schulich School of Law, Dalhousie University, Canada. He has published over 100 articles and chapters on marine and environmental law topics and has written extensively on Arctic governance approaches and challenges. He co-chairs the IUCN World Commission on Environmental Law's Specialist Group on Oceans, Coasts and Coral Reefs and is a member of the International Council of Environmental Law.

Melissa Weber holds a PhD in Polar Governance from the University of Tasmania and has worked as a policy analyst for the International Affairs Directorate of the Department of Fisheries and Oceans, Canada. Her research interests include conservation and sustainable use of marine biodiversity beyond national jurisdiction, and polar politics.

Shelley Wright is Chair of the Department of Aboriginal Studies, Langara College, Canada and was Northern Director of the Akitsiraq Law School, Canada. Her research interests include Inuit studies, Arctic history, international law, climate change and human rights. Her book *Our Ice is Vanishing Sikuvut Nunguliqtuq: A History of Inuit, Newcomers and Climate Change* will be published by McGill-Queen's University Press in 2014.

Foreword: polar oceans governance – an Antarctic perspective

Tony Press

When I was asked to write a foreword to this book, I was sitting in The Hague observing the case Australia had brought against Japan over whaling in the Antarctic. The case has pitched two competing world views on sustainable utilization of the marine environment; on protection of species; on science and its role in ocean management; and on, of course, the operation of international agreements and the interpretation of applicable law. Being asked to write this foreword gave me reason to pause and consider what it is about Antarctica and its Southern Ocean that sets it apart from the rest of the world, including the Arctic.

Antarctica is the highest, driest, coldest continent. It is the least populated and least exploited. It is a vast land mass with an average cover of three kilometres' thickness of glacial ice, surrounded by a cold ocean. The Southern Ocean links the Pacific, Indian and Atlantic oceans, and this combination of the frozen continent and its surrounding waters provides a significant driver of the global climate system. Even accounting for the impacts of the nineteenth and twentieth century overexploitation of whales and seals and some species of penguins and fish, the ecosystems of the Antarctic are relatively pristine compared with the rest of the planet's marine-based ecosystems.

But the Antarctic and Southern Ocean is unique for legal and political reasons as well. It is covered by a set of international agreements collectively called the Antarctic Treaty System (ATS) which sit aside from the United Nations system and which were negotiated in circumstances peculiar to the Antarctic itself. The Antarctic Treaty was a product of cold war rivalry and differing views on Antarctic sovereignty claims, coming face to face with exemplary scientific collaboration in the 1957–1958 International Geophysical Year.

The Antarctic Treaty itself set Antarctica aside as a place free from military action, as a nuclear free zone and as a place for international scientific collaboration. It also put aside argument and conflict over differing views of Antarctic sovereignty claims. The 1982 Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) was negotiated in a climate of concern about the potential for overexploitation of krill, and it introduced what is now referred to as ecosystem-based management of marine resources, and the establishment of precautionary catch limits. The 1991 Protocol on the Protection of the Antarctic Environment (Madrid Protocol) was negotiated in the wake of eleventh hour action to abandon the minerals convention and establish a comprehensive environmental regime that also imposed an indefinite ban on mineral exploitation.

But international legal regimes are not just the words that are written on paper – they are as much the collective practice of players (the states parties) as they are the black letter of the law. The twelve original signatories to the Antarctic Treaty have been joined by many more nations in the ATS, including, latterly, Panama (CCAMLR), Malaysia (once a vocal opponent of the ATS) and Pakistan. And investments in Antarctic and Southern Ocean research capabilities have seen countries like China and Korea emerge as strong players in the regimes that govern Antarctica and the Southern Ocean. The growing company of Antarctic and Southern Ocean players will bring both opportunities and challenges to the governance of the region.

Climate change will also present the ATS with issues that have not been dealt with before: the opening up of new benthic habitats by the collapse of ice shelves; the migration of species to new areas as a result of changing temperature, salinity or acidification; the need for better estimates of the Antarctica ice-sheet mass balance for sea-level rise projections; more precise understanding of oceanic changes that have global significance, such as the future ability of the ocean to store heat and carbon; and the impacts of these changes on Southern Ocean marine life – including the world's biggest under-exploited fishery, the krill fishery.

Certainly these challenges must be met head on – the climate, and environmental and science services provided by Antarctica and the Southern Ocean are irreplaceable. Having robust and adaptive governance regimes that can respond positively to changing environmental and political circumstances is essential to meet these challenges.

This collection of papers provides a wide exploration of polar governance issues covering the Arctic and Antarctic – regimes that are as legally different as the poles themselves. While I may not agree with each and every point made in this collection, it is nonetheless important, and timely, that these topics be canvassed, discussed and debated.

A.J. (Tony) Press

CEO, Antarctic Climate and Ecosystems Cooperative Research Centre,
University of Tasmania, Hobart, Australia

August 2013

Foreword: polar oceans governance in an era of change

Bernie Funston

In the last ten years in particular, legal scholars have turned their attention to polar issues. This volume represents a very valuable contribution to the literature assembled by leading Canadian and Australian experts in the field. What we learn in these pages about Arctic and Antarctic legal regimes is highly relevant for national, regional and international policy-makers generally, not just those who have polar interests.

An important dimension of this publication is its comprehensive and forward-looking treatment of *both* polar regions. For newcomers to polar studies, there is often a tendency to draw analogies between these regions. For example, many recent commentators have put forward the superficially attractive proposition that the approach followed in the Antarctic Treaty System, with the Antarctic Treaty (1959) as its cornerstone, should be superimposed on the Arctic. The authors of this study have identified subtle as well as dramatic differences that make such an approach impractical, while at the same time drawing attention to important system-level connections between the Arctic and Antarctic. As Professors Stephens and VanderZwaag point out in the introductory chapter, '[e]nvironmental change ... is now the dominant and shared characteristic of both regions, especially as climate change makes its effects felt'.

In addition to climate change, issues such as ocean acidification and transboundary pollution, coupled with pressures of globalization, including renewable and non-renewable resource demands, potential new shipping routes and tourism, have made polar regions, the Arctic especially, increasingly important factors in global geopolitics. In the words of Stephens and VanderZwaag: 'Climate change and globalization pressures have placed the spotlight on the adequacy and adaptability of governance arrangements for managing human uses of and impacts on polar seas'. Fundamental ecosystem changes are already occurring in

both polar regions in advance of development. To paraphrase Stephens and VanderZwaag, the dilemma for polar governance is that the main environmental pressures on these regions are exogenous, and while the main players are the dominant greenhouse gas emitters, they have been reluctant to use the polar platform to highlight the need for global climate change governance.

We have come to understand, in this aptly named period described as the 'Anthropocene', that climate change and other exogenous drivers of polar change are nothing less than broad-based symptoms of a burgeoning human population stressing the carrying capacity of the planet.

However, the solution is not simply to cut greenhouse gas emissions and wait for the planet to return to a *status quo ante*. Few, if any, countries of the world have ever assessed a current level of consumption and decided it is enough.¹ Three pressures – more people, more consumption per capita and catch-up among the poor – could make the future world economy very much larger than it is now. World population, currently seven billion, is expected to grow to 10.1 billion by 2100. Achieving or retaining economic growth remains the main focus of almost every economy in the world.

Environmentally responsible regulation of developments that occur in the polar regions is only one dimension of the challenge facing rules-based systems. Even though they are at opposite ends of the earth, the polar regions teach us timely and critical lessons about highly dynamic global geopolitical and socio-economic systems. While the complexity of these issues can be daunting, a focused, multidisciplinary and integrated commitment to understanding and addressing the challenges will be necessary to have a reasonable prospect of success.²

For this reason, studies of polar law such as this one are invaluable. They help us properly situate the Arctic and Antarctic in the context of national, regional and global governance. It is this broad theme of interconnectedness that is a powerful and compelling part of the storyline of this well-researched, well-written, thought-provoking volume.

Bernie Funston
Chair, Canadian Polar Commission
Ottawa, Canada
August 2013

¹ M. McIntyre, S. Murray and B. Funston, 'If not growth, then what?' (2012) 17(2) *International Journal of Business Governance and Ethics* 96–117.

² International Council for Science (ICSU), *Earth System Science for Global Sustainability: The Grand Challenges* (2010).

Preface

'Oceans governance' describes the array of norms, principles, institutions and processes through which the international community is seeking to manage ocean spaces in the twenty-first century as they come under increasing pressure from human activities. The oceans governance narrative dominates research and commentary on ocean affairs, and is widely reflected in the practice of states as they deploy new approaches and tools for cooperative marine management. Governments have recognized the limitations of a zonal paradigm for oceans management, and the necessity for an integrated, coordinated and systemic approach to address contemporary oceans challenges across jurisdictional boundaries. It is an approach compelled by the 1982 United Nations Convention on the Law of the Sea, which acknowledges in its Preamble that 'the problems of ocean space are closely interrelated and need to be considered as a whole'.

This book assesses how an oceans governance agenda is being advanced in the dynamic ocean regions at the highest latitudes. Both the Arctic and Southern Oceans are marine bioregions experiencing the rapid and early effects of climate change and ocean acidification, are areas of vital strategic interest, present significant potential for mineral resource and fisheries exploitation, face increasing pressures from human visitation, and have inestimable environmental, cultural and scientific value. The polar oceans are therefore crucibles for testing how integrated, eco-systemic governance frameworks can be developed to meet and address volatile environmental, political and economic conditions in the current geological era, the Anthropocene, in which human activities have touched all landscapes and seascapes on Earth.

This book takes a 'bipolar' approach, comparing how oceans governance questions are being addressed in the polar regions. In doing so the book focuses on Australian and Canadian experiences in polar oceans management as these governments seek to advance their objectives through global and regional institutions operating in their respective polar domains. The experiences of these similar middle powers provide a valuable lens through which to view polar oceans governance questions more broadly. In engaging with Arctic affairs, Canada faces significant

challenges as a coastal state concerned not only to assert its sovereign rights under the law of the sea, but also to ensure that this does not undermine effective cooperation among Arctic and global stakeholders. In the Southern Ocean the dilemma for Australia is similar, as Australia is a prominent and active claimant to Antarctic territory and offshore areas but must pursue its Southern Ocean objectives within a highly developed and sometimes unresponsive cooperation regime: the Antarctic Treaty System.

The book is the latest product of a long-standing research network of active Australian and Canadian scholars on issues of oceans policy. Since 1993, the Australia Canada Oceans Research Network (ACORN) has brought together Australian and Canadian researchers to collaborate on research on issues of marine policy and law common to these large coastal and federal states. Previous ACORN research initiatives have involved the comparative examination of oceans policies and laws, theoretical approaches to oceans governance, and specific contemporary challenges including sovereignty and security, jurisdiction, shipping, biodiversity and marine environmental protection. The outcome of this research has been three monographs: Kriwoken, Haward, VanderZwaag and Davis (eds), *Oceans Law and Policy in the Post-UNCED Era: Australian and Canadian Perspectives* (1996), Rothwell and VanderZwaag (eds), *Towards Principled Oceans Governance: Australian and Canadian Approaches and Challenges* (2006), and now this volume.

This project commenced with a workshop in December 2011, hosted by the Sydney Centre for International Law at the Faculty of Law, University of Sydney, Australia, with very capable administrative assistance provided by Amber Colhoun, Centre Administrator. At the workshop, attended by the bulk of the contributors to this volume and several additional invitees, including Ben Boer, Michael Byers and Gillian Triggs, the core elements of the project were developed and mapped. The workshop received financial support from the Faculty of Law at the University of Sydney, made possible by the then Dean of Law, Gillian Triggs. We also acknowledge the financial support of the Canadian High Commission, facilitated by Mary Lou Hayman and Carlton Hughes at the Commission in Canberra. The High Commission also arranged for images from the Arctic region, collected by *Canadian Geographic* over eighty years, to be presented at a public exhibition alongside the workshop. These provided stunning illustrations of the beauty and fragility of the Arctic Ocean environment.

We extend thanks to our colleagues who participated in the workshop and who contributed their insights in their chapters in this volume. Many other colleagues also encouraged and contributed in various ways to the

project more generally, including Ben Boer, Ben Saul and Fleur Johns at the University of Sydney. We are particularly grateful to our colleague and founding ACORN member, Don Rothwell, who provided much of the intellectual impetus in the initial formulation of this, the latest ACORN project.

As the book neared completion we were very fortunate to have the editorial assistance of Susan Rolston at Seawinds Consulting Services, with financial support from the Schulich Academic Excellence Fund, Schulich School of Law, Dalhousie University. Susan's efforts were indispensable in the final stages in editing and compiling the manuscript. The research support of the Social Sciences and Humanities Research Council of Canada (SSHRC) is also acknowledged through a grant to David VanderZwaag for a project titled 'Tracking and Envisioning the Future of Arctic Ocean Governance'. We also thank Ben Booth at Edward Elgar for guiding the book from its very earliest stages as a mere concept through to its production and publication. The text is current as at the end of August 2013, although in some instances it was possible to discuss more recent developments.

Tim Stephens and David L. VanderZwaag
Sydney, Australia and Halifax, Canada
August 2013



Map One The Arctic region. Credit: Hugo Ahlenius, UNEP/ GRID-Arendal, http://www.grida.no/graphicslib/detail/arctic-map-political_1547