Journal of the [™] National Association of Environmental Professionals



ENVIRONMENTAL PRACTICE



DEPAUL UNIVERSITY

oi.org/10.1017/S1466046615000149 Published online by Cambridge University Press

ENVIRONMENTAL PRACTICE

Journal of the National Association of Environmental Professionals

Editors-in-Chief

James A. Montgomery, PhD DePaul University

Managing Editor Dan Carroll

DePaul University

Editorial Office

DePaul University 2352 N. Clifton Ave. Room 130 Chicago, IL 60614 (phone) 773-325-2298 (email) dcarro17@depaul.edu

ADVISORY BOARD

Walter F. Baber, PhD California State University, Long Beach

Charles Bartsch ICF International

Kristan Cockerill, PhD Appalachian State University

Thomas R. Cuba, PhD, CEP, CLM Delta Seven, Inc.

Frank J. Dirrigl, Jr. University of Texas-Rio Grande Valley

J. Marshall Eames, PhD Loyola University

Michael S. Francis Walla Walla District Corps of Engineers

Eric G. Haenni, PhD Franciscan University of Steubenville

Elizabeth Keysar, PhD Concurrent Technologies Corporation

Crystal Lawson, REM, CSEM Chromalloy Peter Meyer, PhD The E.P. Systems Group, Inc.

Robert A. Michaels, PhD, CEP RAM TRAC Corporation

John F. Munro, PhD Munro Policy Associates

Robert C. Paehlke, PhD Trent University

Robert L. Perry, PhD The University of Texas of the Permian Basin

Bruce Piasecki, PhD The AHC Group, Inc.

Gary S. Silverman, PhD Bowling Green State University

Zachary Smith, PhD Northern Arizona University

Dorceta Taylor, PhD University of Michigan

Environmental Practice (ISSN 1466-0466) is a quarterly journal published by Cambridge University Press for the National Association of Environmental Professionals in cooperation with the Department of Public Policy Studies, DePaul University, Chicago, IL 60614. Information for contributors appears in March issues and on the journal's Web site at www.journals.cambridge.org/jid_enp.

Environmental Practice is the successor to *The Environmental Professional*, which appeared from 1979 to 1997. *Environmental Practice* honors the fine traditions established by *The Environmental Professional* while simultaneously opening new avenues of discussion on environmental issues. For more information about the NAEP, please visit www.naep.org.

Subscription Information: *Environmental Practice* is published quarterly in March, June, September, and December. Annual subscription rates for Volume 17 (2015): Annual institutional subscription rates (print and electronic): US \$535.00 in the US, Canada, and Mexico; UK £296.00 + VAT elsewhere. Institutional electronic only: \$404.00 in the US, Canada, and Mexico; UK £216.00 + VAT elsewhere.

Publishing and Advertising Offices: Cambridge University Press, 32 Avenue of the Americas, New York, NY 10013-2473, USA; and (outside the US, Canada, and Mexico) Cambridge University Press, The Edinburgh Building, Shaftesbury Road, Cambridge CB2 8RU, England.

Copyright © 2015 National Association of Environmental Professionals

All rights reserved. No part of this publication may be reproduced, in any form or by any means, electronic, photocopying or otherwise, without permission in writing from the National Association of Environmental Professionals. This journal is registered with the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923. Organizations in the USA registered with CCC may copy material (beyond the limits permitted by sections 107 and 108 of US copyright law) subject to payment to CCC of the per copy fee of US \$20.00. This consent does not extend to multiple copying for promotional or commercial purposes. Code 1466-0466/11 \$20.00. ISI Tear Sheet Service, 3501 Market Street, Philadelphia, PA 19104, USA, is authorized to supply single copies of separate articles for private use only.

Printed in the United States of America.

Application to mail at periodical rate is pending in New York, NY, and additional mailing offices. Postmaster: send address changes in the USA, Canada, and Mexico to *Environmental Practice*, Subscription Department, Cambridge University Press, 100 Brook Hill Drive, West Nyack, NY 10994-2133.

CONTENTS

| Brock Hoegh | PRESIDENT'S MESSAGE: Innovation Demands Passion and Commitment | 85 |
|--|---|-----|
| James Montgomery & Dan Carroll | LETTER FROM THE EDITORIAL OFFICE: Letter from the Editorial Office | 87 |
| Johan Liebens ఈ Carl J. Mohrherr | RESEARCH ARTICLE: DDT, Dioxins, and PCBs in Sediments in a Historically Polluted Estuary along the Gulf of Mexico | 89 |
| Dorceta E. Taylor & Kerry J. Ard | RESEARCH ARTICLE: Food Availability and the Food Desert Frame in Detroit: An Overview of the City's Food System | 102 |
| Suzanne von der Porten, Rob de Loë ජ Ryan Plummer | RESEARCH ARTICLE: Collaborative Environmental Governance and Indigenous Peoples: Recommendations for Practice | 134 |
| John R. Dorney, LeiLani Paugh, Alexander P. (Sandy) Smith, Thomas (Brad) Allen, Matthew T. Cusack, Rick Savage, Emily B. Hughes & Breda Muñoz | ENVIRONMENTAL REVIEWS AND CASE STUDIES: The North Carolina Wetland Assessment Method (NC WAM): Development of a Rapid Wetland Assessment Method and Use for Compensatory Mitigation | 145 |
| Zachary A. Smith | PERSPECTIVES FROM THE FIELD: Collaborative Management in Natural Resources and Environmental Administration | 156 |
| John F. Munro | BOOK REVIEW: Ecofeminism and Rhetoric, Critical Perspectives on Sex, Technology, and Discourse | 160 |

CONTRIBUTORS

Mission Statement for Environmental Practice

Aims and Scope

Environmental Practice is the official journal of the National Association of Environmental Professionals (NAEP). The central purpose of *Environmental Practice* is to provide an open forum to NAEP members and other concerned individuals for the discussion and analysis of significant environmental issues. Research Articles and Environmental Reviews and Case Studies appearing in *Environmental Practice* are peer reviewed and aim for the highest standards of professional quality.

Environmental Practice is a source for continuing professional renewal and development. It aims to serve men and women at all stages of their careers, from initial training through mid- and senior-levels. Environmental work is an exciting, dynamic field, and *Environmental Practice* strives to match that pace with lively and timely commentary on the critical issues of the day. *Environmental Practice* aims to provide authoritative discussion on issues of wide interest to the international community of environmental professionals.

Professionals from many different disciplinary backgrounds, working in many different arenas, are faced with developing imaginative approaches for the practical resolution of a wide variety of environmental problems. *Environmental Practice* provides a comprehensive outlet for the publication of such interdisciplinary findings. This publication actively seeks breadth of viewpoint and method because it holds that solutions to environmental problems are often to be found in understanding the linkages among issues previously considered separate. Periodically, *Environmental Practice* will devote its pages to selected topics of special concern to a significant segment of the readership.

Priority for publication is given to articles that offer insightful views on the importance and interpretation of results from an interdisciplinary perspective. Reports of findings should go beyond a laboratory analysis, a field experiment, a philosophical discussion, or a theoretical modeling, for example, and discuss the implications of the findings for public policy or professional practice. Environ*mental* Practice seeks especially to publish studies that link data and findings in science and technology with issues of public policy, health, environmental quality, law, political economy, management, and the appropriate standards for expertise. Many publications achieve excellence through tightly focused specialization, but in contrast Environmental Practice seeks its accomplishments through the promotion of excellent research and writing on the common interests among different kinds of specialists.

Join the Dialog

The central purpose of *Environmental Practice* is to provide a forum for the discussion and analysis of significant environmental topics. An important part of this discussion is the "Letters to the Editor" section that appears in occasional issues of *Environmental Practice*.

The editors welcome your comments and insights on articles appearing in this or other issues of the journal.

Call for papers for publication in the scholarly journal:

ENVIRONMENTAL PRACTICE

The journal of the National Association of Environmental Professionals

WATER RESOURCES vol. 18 no. 1 (March 2016) with Guest Editor Betty Dehoney

Water is the driving force of all nature – Leonardo da Vinci

Getting safe and reliable water to our communities, while balancing the needs of the environmental resources dependent upon the same water has always been a challenge. These challenges are being exacerbated by a variety of factors, including (but not limited to):

CAMBRIDGE

bridge University Press VERSITY PRESS

- Population increases have resulted in a demand that exceeds the supply
- Competing demands (municipal, industrial, agriculture, energy and environmental) for the same water supply
- Water basins located across international and multi-state boundaries provide complicated water rights issues
- Challenges of "creating" new water sources in the face of public acceptability (e.g., recycling wastewater for potable use) and regulatory hurdles (e.g., desalination)
- Water quality contamination

https://doi.org/10.1017/S14660466

- Changing regulatory conditions (endangered species, wetlands, water quality, etc.) affecting the delivery and use of water
- Infrastructure built without consideration of climate change
 - seasonality and amount of precipitation
 - temperature affecting whether the precipitation falls as rain or snow
 - resiliency of our infrastructure and condition of the coastal wetlands with anticipated rise in the sea level.

The March 2016 issue of Environmental Practice is devoted to the subject of Water Resources. We welcome a variety of perspectives from scholars, practitioners, and students in a variety of fields.

Deadline for submittals is August 15, 2015 to dcarro17@depaul.edu

Sample issues of the journal can be found at:

http://journals.cambridge.org/action/ displayJournal?jid=ENP

Guidelines for publication can be found at:

http://journals.cambridge.org/action/ displayMoreInfo?jid=ENP&type=ifc

For questions, please contact Dan Carroll, Managing Editor, at 773-325-2298, or by email at dcarro17@depaul.edu

CAMBRIDGE

Outstanding Titles from Cambridge

A new report from the IPCC!

Climate Change 2013 – The Physical Science Basis Working Group I Contribution to

the Fifth Assessment Report of the Intergovernmental Panel on Climate Change

\$190.00: Hb: 978-1-107-05799-9: 1,552 pp. \$99.00: Pb: 978-1-107-66182-0

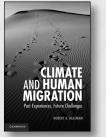


The Arctic Climate System, 2nd Edition

Mark C. Serreze and Roger G. Barry \$125.00: Hb: 978-1-107-03717-5: 400 pp.

Climate and Human Migration Past Examples, Future Challenges

Robert A. McLeman \$99.00: Hb: 978-1-107-02265-2: 310 pp. \$39.99: Pb: 978-1-107-60670-8



Transport in the Atmosphere-Vegetation-Soil Continuum Arnold F. Moene and Jos C. van Dam \$75.00: Hb: 978-0-521-19568-3: 458 pp. Announcing the Special Publications of the International Union of Geodesy and Geophysics book series!

Extreme Natural Hazards, Disaster Risks and Societal Implications

Edited by Alik Ismail-Zadeh, Jaime Urrutia-Fucugauchi, Andrzej Kijko, Kuniyoshi Takeuchi, and Ilya Zaliapin \$140.00: Hb: 978-1-107-03386-3: 464 pp.

Terrestrial Biosphere-Atmosphere Fluxes

Russell Monson and Dennis Baldocchi \$85.00: Hb: 978-1-107-04065-6: 507 pp.

Dangerous Neighbors: Volcanoes and Cities

Grant Heiken \$30.00: Hb: 978-1-107-03923-0: 196 pp.

Too Hot to Touch The Problem of High-Level Nuclear Waste William M. Alley and Rosemarie Alley \$29.99: Hb: 978-1-107-03011-4: 383 pp.

The History of Global Climate Governance

Joyeeta Gupta \$75.00: Hb: 978-1-107-04051-9: 262 pp.

Natural Disasters and Adaptation to Climate Change

Edited by Sarah Boulter, Jean Palutikof, David John Karoly, and Daniela Guitart \$120.00: Hb: 978-1-107-01016-1: 284 pp.

Most books now available in electronic format! Visit **ebooks.cambridge.org** to browse electronic titles.

View our full Earth and environmental sciences catalog at www.cambridge.org/earth @CambUP_earthsci Coastal Wetlands of the World Geology, Ecology, Distribution and Applications David B. Scott, Jennifer Frail-Gauthier, and Petra J. Mudie

\$120.00: Hb: 978-1-107-05601-5: 385 pp. \$65.00: Pb: 978-1-107-62825-0

Water Resilience for Human Prosperity

Johan Rockström et al. \$85.00: Hb: 978-1-107-02419-9: 340 pp.

Energy Technology Innovation Learning from Historical Successes and Failures

Edited by Arnulf Grübler and Charlie Wilson \$120.00: Hb: 978-1-107-02322-2: 400 pp.

Hurricane Katrina and the Forgotten Coast of Mississippi

Susan Cutter, Christopher T. Emrich, Jerry T. Mitchell, Walter W. Piegorsch, Mark M. Smith, and Lynn Weber \$120.00: Hb: 978-1-107-02394-9: 250 pp.

Oil in the Environment Legacies and Lessons of the Exxon Valdez Oil Spill

John A. Wiens \$120.00: Hb: 978-1-107-02717-6: 482 pp. \$48.00: Pb: 978-1-107-61469-7

Textbooks

Essentials of the Earth's Climate System Roger G. Barry and Eileen A. Hall-McKim \$130.00: Hb: 978-1-107-03725-0: 271 pp.

Climate Change, 2nd Edition Biological and Human Aspects

\$65.00: Pb: 978-1-107-62049-0

Jonathan Cowie \$69.99: Pb: 978-1-107-60356-1: 577 pp.

Prices subject to change.

