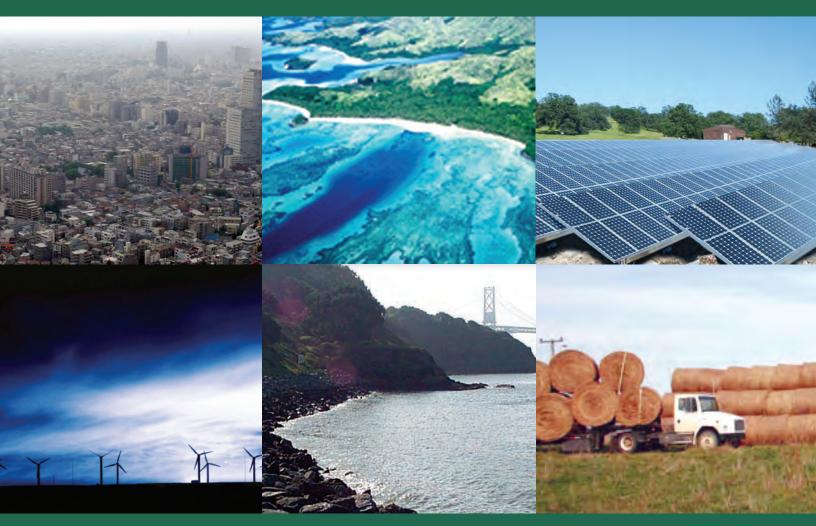
Journal of the [™] National Association of Environmental Professionals



ENVIRONMENTAL PRACTICE



DEPAUL UNIVERSITY

os://doi.org/10.1017/S1466046611000597 Published online by Cambridge University Press

ENVIRONMENTAL PRACTICE

Journal of the National Association of Environmental Professionals

Editors-in-Chief

Kelly Tzoumis, PhD (Lead) 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.

J. Marshall Eames, PhD Loyola University

Eric G. Haenni, PhD Crossroads Environmental

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 Arisona 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 13 (2011): Annual institutional subscription rates (print and electronic): US \$341.00 in the US, Canada, and Mexico; UK £184.00 + VAT elsewhere. Institutional electronic only: \$278.00 in the US, Canada, and Mexico; UK £147.00 + VAT elsewhere. Institutional print only: \$311.00 in the US, Canada, and Mexico; UK £165.00 + VAT elsewhere. Individuals print only: \$212.00 in the US, Canada, and Mexico; UK £111.00 + 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 $\ensuremath{\mathbb{C}}$ 2011 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.

Call for papers for publication in the scholarly journal:

Environmental Practice

The journal of the National Association of Environmental Professionals

PROFESSIONAL ETHICS FOR ENVIRONMENTAL PROFESSIONALS vol. 14 no. 3 (Sepember 2012)

This issue of *Environmental Practice* is dedicated to Dr. James (Jim) Roberts PhD, CEP (deceased 2007) who was a prominent long-time member of the NAEP and Academy of Board Certified Environmental Professionals (ABCEP) Boards of Directors, the ABCEP Certification Review Board, and the Editorial Advisory Board of our journal in its previous incarnation as *The Environmental Professional*. Jim was a consummate environmental professional who, as a cleric and otherwise thoughtful person, was especially interested in ethics and specific ethics issues potentially or actually facing environmental professionals. Jim wisely counseled his colleagues on ethics and ethical resolution of issues, and consistently succeeded at bringing opposite sides together with a shared commitment to ethics as a necessary, even if sometimes insufficient, condition for resolution.

This issue of *Environmental Practice* is devoted to professional ethics for environmental practitioners. Manuscripts highlighting case studies and best practices in all areas of the development and application of professional ethics for environmental practitioners are encouraged. Discussions of little recognized, unresolved, or difficult issues are welcomed. Topics and themes could include, but are not limited to: (i) the importance of developing ethical reflection by practitioners; (ii) analysis of perspectives on environmental and professional ethics; (iii) ways to think about ethical problems; (iv) legal and ethical issues in relationships with employers and clients; (v) loyalty to the employer – what duties are owed an employer?; (vi) conflict of interest – what constitutes a *conflict*, and how can practitioners recognize and resolve them?; (vii) confidentiality and proprietary information; (viii) professional ethics and safety; (ix) plagiarism and credit; (x) duty of competence and diligence – what kinds of work is the practitioner qualified to do? Broad perspectives are welcome from scholars, practitioners, and students.

> Deadline for submittals is February 15, 2012 to dcarro17@depaul.edu

Sample issues of the journal can be found at:

The editorial office of *Environmental Practice* is located at DePaul University.

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

https://doi.org/10.1017/51466046611000597 Published online by Cambridge University Press

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. Environmental 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

HYDROFRACTURING ("Hydrofracking") vol. 14 no. 4 (December 2012)

Hydrofracturing ("hydrofracking") involves injecting water under high pressure into a bedrock formation via a wellbore. This process removes sediment and rock fragments from existing fissures and fractures and also increases their size and extent. While hydrofracking technology has been in use since the 1940's, the refinement of the technology for horizontal drilling has recently gotten to the point where aiming a drill string toward a particular formation and depth has become more reliable. The combination of old and new technology has provided the environmental community with a real-time dilemma of how to provide for energy independence while protecting natural resources.

Manuscripts are sought with an emphasis on the legal, environmental, ecological, social, political and human health aspects of hydrofracking. Manuscripts highlighting case studies and best practices in all areas of hydrofracking are particularly encouraged. Specific topics and themes that could be addressed include, but are not limited to: (i) public policy efforts being pursued to minimize environmental damage resulting from hydrofracking; (ii) impacts of hydrofracking on groundwater and surface water resources; (iii) aspects related to the permitting of hydrofracking well site locations; (iv) impacts of hydrofracking and alternative/green energy development on terrestrial ecosystems; (v) critique or defense of USEPA's new study plan to evaluate the effects of hydrofracking on groundwater; (vi) hydrofracking and NEPA – what is the role of environmental review? (vii) Hydrofracking is an extraction technique that was invented decades ago but which has suddenly exploded into the national consciousness. Why? Who or what is driving this narrative? (viii) If, as some suggest, natural gas is the 'bridge' to a green energy future and energy independence, is hydrofracking worth the cost?

Deadline for submittals is May 15, 2012 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 The editorial office of Environmental Practice is located at DePaul University.

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

https://doi.org/10.1017/S1466046611000597 Published online by Cambridge University Press