

W A T E R   R E S O U R C E S

# IMPACT

March 2013 | Volume 15 | Number 2



**HUMAN DIMENSIONS  
OF WATER RESOURCES  
MANAGEMENT**

**AWRA**

*Community, Conversation, Connections*

**AMERICAN WATER RESOURCES ASSOCIATION**



**AWRA**  
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(for full year membership January 1 – December 31)

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## JOB TITLE (circle one)

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- JT2 Engineering (Non-mgmt; i.e., Civil, Water Resources, Planning)
- JT3 Scientific (Non-mgmt; i.e., chemist, biologist, hydrologist, etc.)
- JT4 Marketing/Sales (Non-mgmt)
- JT5 Faculty
- JT6 Student
- JT7 Attorney
- JT8 Retired
- JT9 Computer Scientist (GIS, modeling, etc.)
- JT10 Elected/Appointed Official
- JT11 Volunteer/Interested Citizen
- JT12 Non-Profit
- JT13 Other: \_\_\_\_\_

## DISCIPLINE (circle one)

- AG Agronomy
- BI Biology
- CH Chemistry
- EC Economics
- ED Education
- EG Engineering
- FO Forestry
- GR Geography
- GE Geology
- GI Geographic Info. Systems
- HY Hydrology
- JR Journalism
- LA Law
- LM Limnology
- OE Oceanography
- PH Physics
- PS Political Science
- PB Public Health
- SO Soil Science
- OT Other: \_\_\_\_\_

## EMPLOYER (circle one)

- CF Consulting Firm
- EI Educational Institution (Faculty/Staff)
- ES Educational Institution (Student)
- LR Local/Regional Gov't Agency
- SI State/Interstate Gov't Agency
- IN Industry
- LF Law Firm
- FG Federal Government
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- NP Non-Profit Organization
- OT Other: \_\_\_\_\_

## How did you learn about AWRA?

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- AWRA Website  Other: \_\_\_\_\_

## What's your reason for joining?

- Info from Journal/IMPACT  Networking
- Conference Discount  Technical Committees
- Other: \_\_\_\_\_

Did someone recommend that you join AWRA? Who?  
\_\_\_\_\_



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## EDUCATION (circle one)

- HS High School
- AA Associates
- BA Bachelor of Arts
- BS Bachelor of Science
- MA Master of Arts
- MS Master of Science
- JD Juris Doctor
- PhD Doctorate
- OT Other: \_\_\_\_\_

**AWRA**

c/o Middleburg Bank | P.O. Box 2217 | Leesburg, VA | 20177-7580

Phone: 540.687.8390 | Fax: 540.687-8395 | info@awra.org

www.AWRA.org

Despite advances in biophysical sciences and engineering, questions persist around the human dimensions of water resources and, in particular, what drives and constrains conservation practices and management decisions. Human dimensions research investigates behavior and decision making from multiple perspectives including how residents, landowners, resource professionals, organizations, and government officials perceive, value, and interact with water resources. As this issue of *Water Resources IMPACT* demonstrates, human dimensions research is increasingly critical to effective water resource planning, policy, and programming.

### FEATURE ARTICLES

**3 Applied Social Science Research to Improve Water Quality Programming: Participatory Evaluation of Iowa's Clean Water State Revolving Fund Programs ... J. Gordon Arbuckle, Jr., Patti Cale-Finnegan, and Tony Toigo**

This article uses a farmer survey and focus groups with county staff to explore Iowa farmers' participation in a conservation loan program. Research findings validate loan programs as an important alternative to grants and cost-share.

**6 Beyond the Trees: Community as a Riparian Restoration Outcome and Resource ... Andrea Armstrong, Richard C. Stedman, Beth Roessler, and Scott Coppett**

Residential riparian restoration programs traditionally have been designed to achieve ecological outcomes. This article, however, demonstrates that restoration projects also have important social outcomes including increased awareness and sense of community.

**9 Increasing Voluntary Conservation Practice Adoption Through Research and Relationship Building ... Mae Davenport, Amit Pradhananga, and Paul Nelson**

This article describes how a landowner survey has informed efforts to increase voluntary adoption of conservation practices. Using social science research findings, county resource managers redesigned staff training and tailored relationship building initiatives to landowners' needs.

**13 Using Social Science Data to Evaluate Residential Stormwater Treatments in Duluth, Minnesota ... Karlyn Eckman, Valerie Were, Valerie Brady, Jesse Schomberg, Richard Axler, and Chris Kleist**

Social and hydrologic data are synthesized in this article to evaluate the effects of a neighborhood stormwater reduction project and to inform urban infrastructure planning.

**17 Enhancing Water Sustainability Through University Policy Collaborations: Experiences and Lessons From Researchers and Decision Makers ... Ray Quay, Kelli L. Larson, and Dave D. White**

Water resource decision making under uncertainty requires collaboration between scientists and policy makers. This article highlights innovative approaches to linking knowledge and action through relationship building and co-learning.

**20 Improving Evaluation of International Water Resources ... Valerie Were and Karlyn Eckman**

Oftentimes the social impacts of international water projects sponsored by nongovernmental organizations are not closely monitored. This article features four best practices for evaluation of the social and cultural outcomes of international water projects.

### Other features in this issue ...

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*(Opinions expressed by our columnists are their own and do not represent the opinion or position of AWRA.)*

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**AMERICAN WATER RESOURCES ASSOCIATION**  
 4 West Federal Street • P.O. Box 1626  
 Middleburg, VA 20118-1626  
 (540) 687-8390 / Fax: (540) 687-8395  
 E-Mail: [info@awra.org](mailto:info@awra.org) • Homepage: [www.awra.org](http://www.awra.org)

**EDITOR-IN-CHIEF**

**N. EARL SPANGENBERG**  
 College of Natural Resources  
 University of Wisconsin-Stevens Point  
 Stevens Point, WI 54481  
 (715) 346-2372 • Fax: (715) 346-3624  
 E-Mail: [espangen@uwsp.edu](mailto:espangen@uwsp.edu)  
 (Support for Dr. Spangenberg is provided by the  
 College of Natural Resources  
 University of Wisconsin-Stevens Point)

**TO PLACE AN AD IN THIS PUBLICATION CONTACT**

**CHARLENE E. YOUNG**  
 Phone/Fax: (256) 650-0701  
 E-Mail: [charlene@awra.org](mailto:charlene@awra.org)

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**ASSOCIATE EDITORS**

**JOE BERG**  
 (jberg@biohabitats.com)  
 Biohabitats, Inc. ~ Baltimore, Maryland

**ERIC J. FITCH**  
 (fitch@marietta.edu)  
 Marietta College ~ Marietta, Ohio

**MICHELLE HENRIE**  
 (michelle@mhenrie.com)  
 MHenrie | Land Water Law ~ Santa Fe, New Mexico

**JONATHAN E. JONES**  
 (jonjones@wrightwater.com)  
 Wright Water Engineers ~ Denver, Colorado

**CLAY J. LANDRY**  
 (landry@waterexchange.com)  
 WestWater Research ~ Boise, Idaho

**RICHARD H. MCCUEN**  
 (rhmcuen@eng.umd.edu)  
 University of Maryland ~ College Park, Maryland

**LAUREL E. PHOENIX**  
 (phoenixl@uwgb.edu)  
 University of Wisconsin ~ Green Bay, Wisconsin

**E. TIM SMITH**  
 (etsmithsiri@aol.com)  
 Sustainable Water Resources Roundtable

**TECHNICAL DIRECTOR**

**RICHARD A. ENGBERG**  
 (dick@awra.org)  
 American Water Resources Association  
 Middleburg, Virginia

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**COVER PHOTO CREDITS:** Background photo courtesy of Scott County, Minnesota (see article on pgs. 9-12); (inset, left) rain gardens with rock sumps help to infiltrate water through heavy clay soils; (inset, right) impervious surfaces and steep slopes in Duluth's urban stream (see article on pgs. 13-16).



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