



**AMERICAN WATER
RESOURCES ASSOCIATION**

Community, Conversation, Connections



My Twenty Minutes: Selected AWRA Activities

Western States Water Council – Newport, OR

3 August 2018

Michael E. Campana

Technical Director, AWRA

Professor of Hydrogeology & Water Resources Mgmt.

Oregon State University

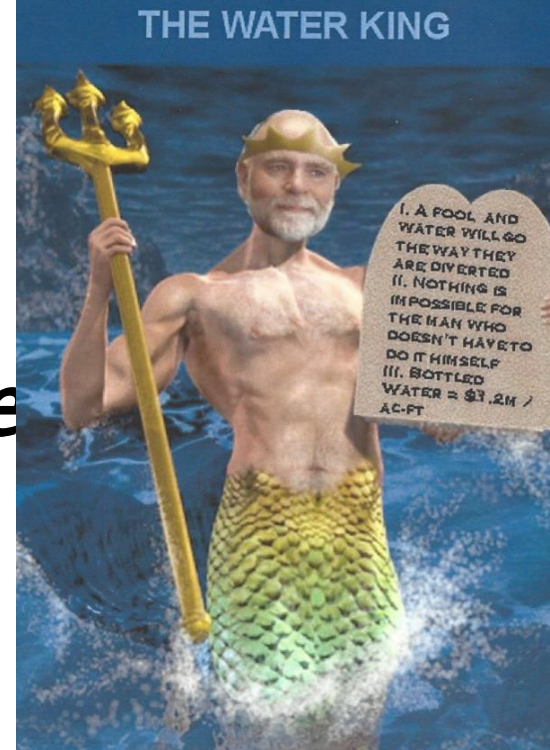
www.waterwired.org @WaterWired

The Water King's Three Commandments!

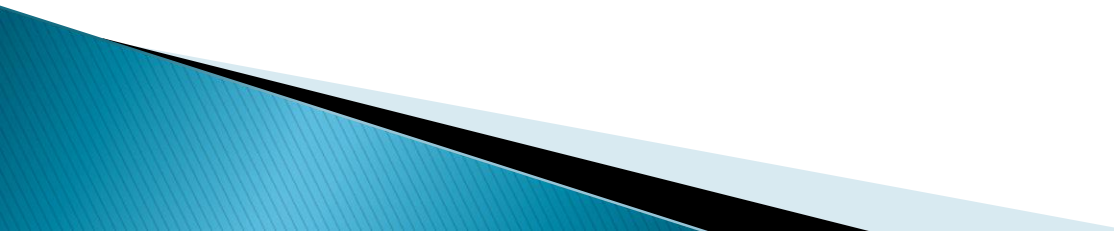
1) *“A fool and water will go the way they they are diverted.”*
– African proverb

2) *“Nothing is impossible for the man who doesn't have to do it himself.”*
– A.H. Weller

3) *Bottled water = \$3.2M/acre-foot*
(see #1)



Topics

- Webinars
 - Conferences
 - *Water Resources IMPACT*
 - Transboundary Groundwater Conference
 - Groundwater Visibility Initiative
 - 8th World Water Forum
 - Q & A
- 

Webinars

<https://www.awra.org/webinars/>

Middle of each month – Wednesdays

Variety of topics: general & specific

**Solicit ideas from the public and
membership (committees!)**

Speakers from all sectors

Can handle 1000 attendees

Thanks to Stantec for support!



Upcoming 2018 AWRA Webinars

(1 PM ET unless otherwise noted)

Hydrologic Modeling for Austin's Integrated Water Resources Plan

Richard Hoffpauir, Hoffpauir Consulting

22 August

Groundwater Discharges and Clean Water Act Compliance

Marcia Greenblatt, PhD, Integral Consulting

Kathy Robb, Partner - Sive, Paget & Riesel

19 September

Webinar Software
provided by:



AMERICAN
WATER RESOURCES
ASSOCIATION

2018 AWRA Webinars

(1 PM ET unless otherwise noted)

Forecast-Informed Reservoir Operations Improve Water Management

**Jay Jesperse, Sonoma County Water Agency;
Marty Ralph, Scripps; Cary Talbot, USACE**

22 October

Setting Up a Water Bank from the Ground(water) Up

Mike Hermanson, Spokane County

14 November

Webinar Software
provided by:



AMERICAN
WATER RESOURCES
ASSOCIATION

Webinar Suggestions?

Contact: Michael E. Campana

aquadoc@awra.org

www.awra.org/webinars/

**Provide speaker's name and
contact information, topic, and why it's
important.**

Scheduling for 2019!

Image part with relationship ID r1d13 was not found in the file.



Webinar Software
provided by:

Stantec



AMERICAN
WATER RESOURCES
ASSOCIATION

2018 AWRA Annual Conference
4 – 8 November Baltimore, MD
Program Available!

Go to <https://bit.ly/2OxRbfc>



2019 AWRA Annual Conference
3 – 7 November Salt Lake City, UT

Go to www.awra.org

2019 AWRA Specialty Conferences

1) Spring: 23-27 March Omaha, NE
Setting Conditions for IWRM Success

Program Available Soon!

2) Summer: 16-19 June Sparks, NV
***Improving Water Infrastructure
through Resilient Adaptation***

**3) Fall (?): Water Security (w/ Chinese
Academy of Sciences) – Beijing**

Have

an

Contact

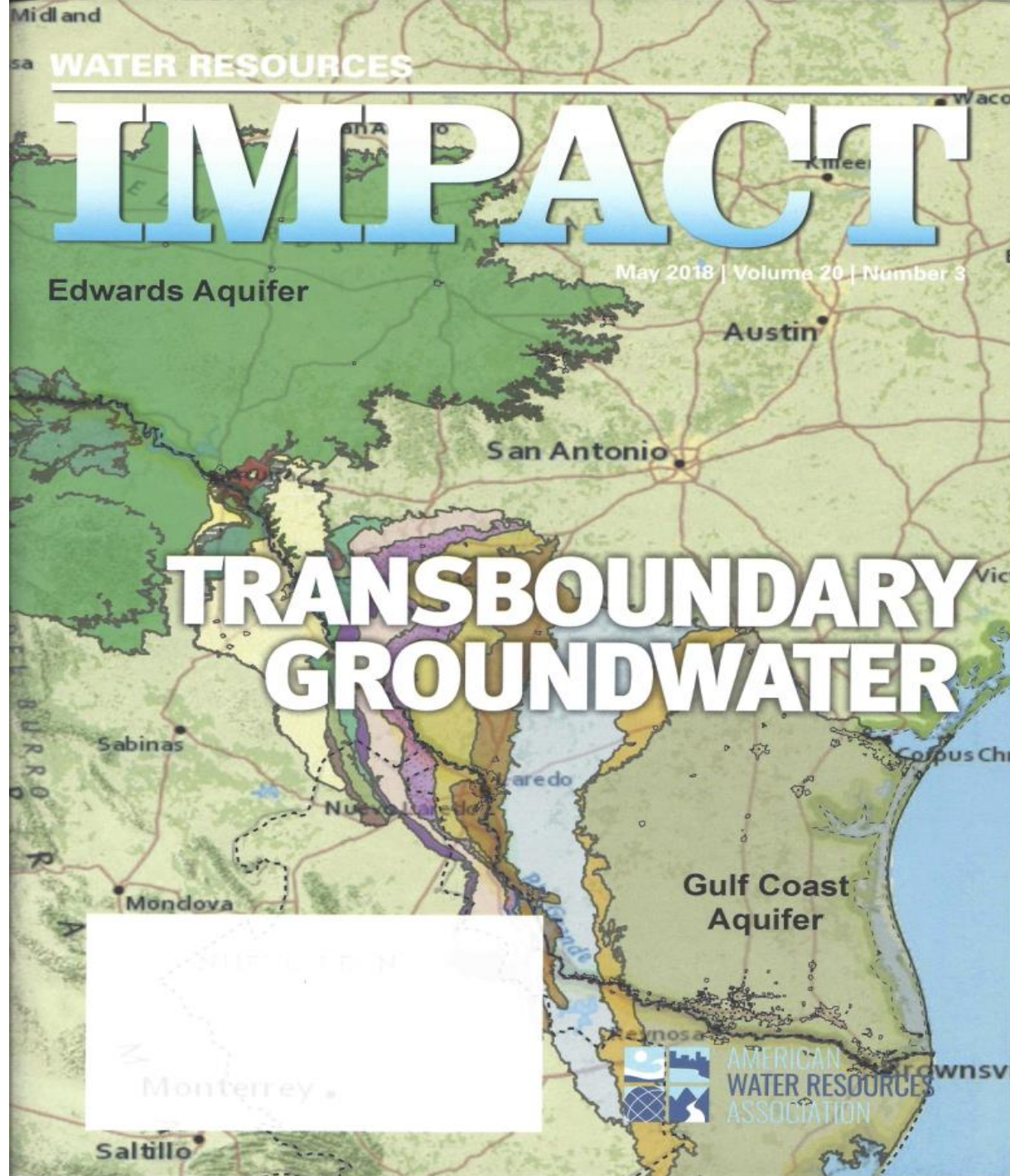


**AMERICAN
WATER RESOURCES
ASSOCIATION**



Water Resources IMPACT

- Bimonthly magazine with 6–8 short (800 – 1100 words) articles on a single theme
- Topic often aligned with a (specialty) conference
- Uses guest editors
- B. Bateman – Editor-in-Chief
M. Campana – Technical Editor
C. McCrehin – Managing Editor
- Advisory Board – selects topics



Late 2018 – 2019 *IMPACT* Editorial Calendar

1. September 2018 – *Great American Megabasin: Chesapeake and Delaware*
 2. November – *State of the Art in Water Science*
 3. January – *State Water Plans*
 4. March – *Citizen Science*
 5. May – *Setting Conditions for IWRM Success*
 6. July – *Texas Water*
 7. September – *Utah focus*
 8. November – *Conservation Financing*
- 



**AMERICAN WATER
RESOURCES ASSOCIATION**
Community, Conversation, Connections

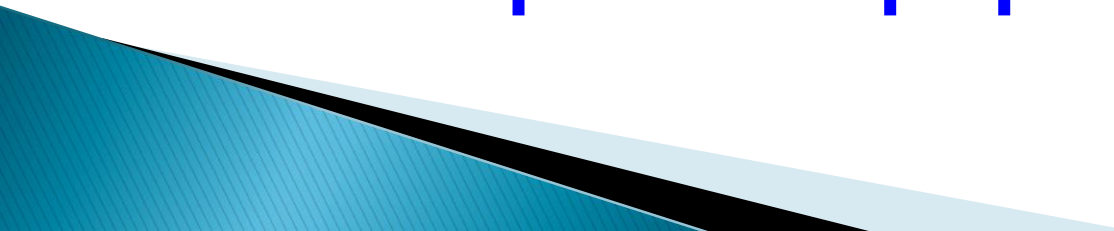
Transboundary Groundwater Conference

Fort Worth, TX

9–11 July 2018

“There are lies, there are damn lies, and there are hydrologists’ reports.” – Texas legislative hearing, 2 February 2016 (thanks to Robert Mace)

Highlights (also see #AWRAGW)

- 75 attendees
 - 52 presentations; 3 panels
 - *Water Resources IMPACT* issue
 - Enthusiastic crowd – 50+ for working session Wednesday AM
 - Great keynotes – Alfonso Rivera (Canada) and Neno Kukuric (The Netherlands)
 - Develop white paper
- 

LEADERSHIP

Over use (unsustainable) overdraft

increased demand

land use/cover change

Climate impacts on SW

increased consecutive dry years

Natural Disasters

Changing Sector Composition

Increasing Conflict

Increasing

Integrated management SW & GW

Lack of Regulatory or Governance Frameworks

disparate values & needs

Locations cross-border

Next Gen Transboundary GW Science & Management

Security

Lack of Consistent

INQUIRY
What questions do we NOT know
what questions do we need to ask

Increased Stakeholder Interest

Need to ID full spectrum of users / interests / parties

Bring engineers into process earlier

Need to engage full spectrum of stakeholders + provide commensurate portfolio of recommendations

Environment as Stakeholder

Manage "stakeholder" power disparities

Cognitive Appreciation for the Future

Embracing new Scientific ~~Methods~~ Techniques

Funding challenges

Citizen Science

Borders

"Make the 'invisible' visible"

Transparency

Transparency

GW Valuation

Science as a Tool for Governance

Multidisciplinarity

Processes ID'g stakeholders & needs

Understanding Human Decision-Making

Disconnect b/w Humans / Environment

TRUST

Economic Trade-off Boundaries

Raise Awareness

Communication & Education re. Transboundary Issues

Need for Early Education

Economic Development

Processes ID'g stakeholders & needs

Understanding Human Decision-Making

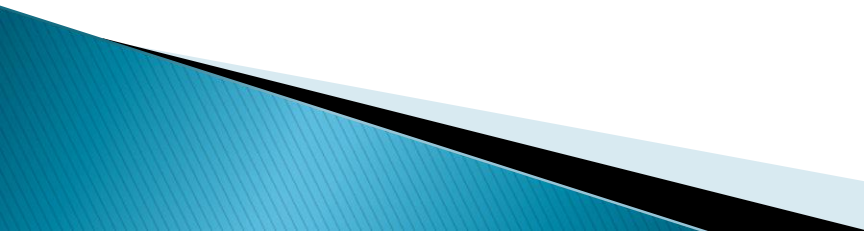
Disconnect b/w Humans / Environment

Groundwater Visibility Initiative

Joint National Ground Water Association (NGWA) and AWRA Workshop on 28 April 2016 in Denver; 25 attendees

Rationale: For many, groundwater is out of sight and out of mind. Our inability to readily see groundwater contributes to groundwater's **lack of visibility** in many discussions of *water policy, governance, and management*. The GVI seeks to remedy this situation.

See report: <http://bit.ly/2b9Vglw>



Workshop Findings

- 1) Governing and managing groundwater requires working with people
- 2) Data and information are key
- 3) Some “secrets” remain
- 4) We need to take care of what we have
- 5) Effective groundwater management is critical to an integrated water management portfolio adaptive and resilient to drought and climate change
- 6) To be robust, agriculture, energy, environment, land-use planning, and urban development sectors policies must incorporate groundwater considerations



**AMERICAN WATER
RESOURCES ASSOCIATION**
Community, Conversation, Connections

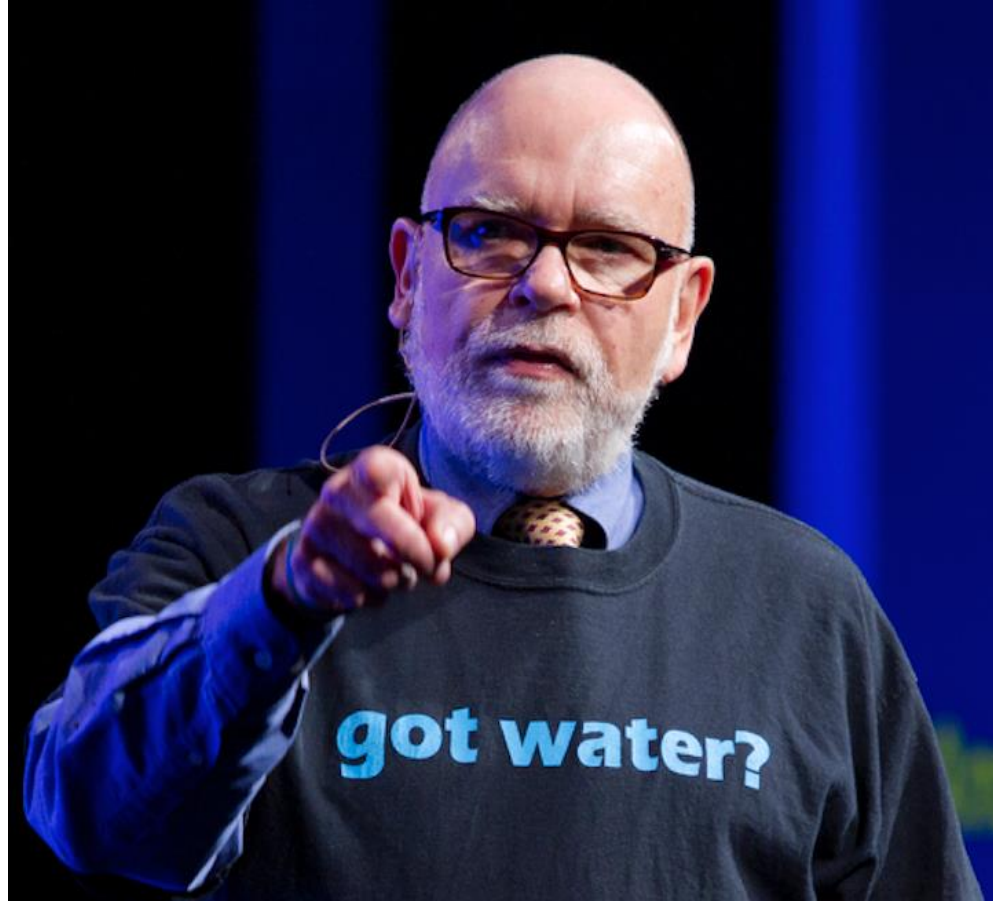
8th World Water Forum

Brasilia, Brazil

18–23 March 2018

<http://www.worldwaterforum8.org>

AWRA convened/organized a session on ‘Water and Energy’ and formally participated in the Integrated Water Resources Management (IWRM sessions)



Thank You!

aquadoc@oregonstate.edu; aquadoc@awra.org

Blog: <http://www.waterwired.org>

Twitter: @WaterWired

LinkedIn