

## Working with Nature to Build Water Security

By Sandra Postel

The changes in weather patterns and water flows that we're beginning to see as the planet warms call into question the very assumptions that have underpinned our water projects for decades. In 2008, seven top water scientists argued persuasively in the journal *Science* that "stationarity" -- the foundational concept that hydrologic systems vary and fluctuate within a known set of boundaries -- is dead. When it comes to water, in other words, the past is no longer a reliable guide to the future.

We are living in uncertain times. The tools that engineers use to plan investments of more than half a trillion dollars a year in dams, reservoirs, canals, and other big water projects can no longer be fully trusted. How then do we protect public health and safety, ensure food security, and manage risk? When the floods come, will the levees hold? With more severe droughts likely, will the reservoirs refill? Does it make sense to build a big new dam if the water it holds back may be insufficient to generate hydroelectric power? Will massive amounts of sediment eroded from mountainsides by intense rainstorms fill a new reservoir with sediment and cut short its useful life? Will farms get the irrigation water they need once the glacier-fed river flows have dwindled? How do we plan for what once seemed unthinkable -- the disappearance of prime water sources for cities, industries, and farms? In

short, how do we live with these new realities?

Decades ago, Albert Einstein reminded us of a fundamental lesson that's hard to learn: "We can't solve problems by using the same kind of thinking we used when we created them." Fortunately, just when it's crucially needed, a new mindset about water is taking shape. It's one that blends engineering, ecology, economics, and related fields into a more holistic approach that recognizes the fundamental value of nature's services.

This evolving mindset is already changing the way we manage water. Working with, rather than against, nature; pioneering cities, farmers, businesses, and conservationists are rejuvenating watersheds and floodplains, and replenishing rivers, groundwater, and soils. The result is a smarter way to mitigate flood damages, prepare for droughts, restore habitats, grow food, augment water supplies, and generally strengthen water security.

There's inspiration in transformations like that in Arizona's Verde Valley, one of the few remaining healthy riparian areas in the American Southwest, where conservationists, farmers, local businesses, and some half dozen corporations have come together to return water to the Verde and enable the river to flow continuously again. There's inspiration, as well, in Australia's Murray-Darling basin, where government agencies have adopted policies to rebalance water use in nature's

favor. And also in Mexico's Colorado River Delta, where two nations worked creatively with scientists and conservationists to give water back to an ecosystem once written off as dead. The delta's revival speaks not only to the resilience of ecosystems, but also to what we humans can accomplish when we put our minds, hearts, and hands to the task.

We can choose to write a new water story. If the twentieth century was the age of dams, diversions, and depletion, the twenty-first century can be the age of replenishment, the time when we apply our ingenuity to living in balance with nature. In so doing, we can quench our thirst while leaving a healthy water cycle for future generations. As we shift from the utilitarian view of water as a "right" and a "resource" toward the Earthrise view of water as the planet's greatest gift, our moral compass will direct us toward sharing water, not only among ourselves but with all living things.

In the end we will discover that what seem like acts of altruism or stewardship in fact serve our own interests -- because water connects us to all of life.

*Sandra Postel is director of the Global Water Policy Project and author of Replenish: The Virtuous Cycle of Water and Prosperity (Island Press, 2017) from which this article is excerpted and adapted.*



Fall 2019

The *Dialogue* is a publication of the  
New Mexico Water Dialogue.

**Board of Directors**

**Aron Balok**, Roswell  
**Michael Benson**, Ft. Defiance  
**Consuelo Bokum**, Santa Fe  
**John Brown**, Corrales  
**Aaron Chavez**, Farmington  
**Eileen Dodds**, Datil  
**Gary Esslinger**, Las Cruces  
**Dael Goodman**, Las Cruces  
**Don Diego Gonzales**, Velarde  
**Sharon Hausam**, Laguna  
**Simeon Herskovits**, Taos  
**Wade Holdeman**, Fort Sumner  
**Jason John**, Navajo Nation  
**John Jones**, Estancia Basin  
**John Leeper**, Socorro  
**Patrick McCarthy**, Albuquerque  
**Alex Puglisi**, Santa Fe  
**Jeffrey Samson**, Albuquerque  
**Bruce Thomson**, Albuquerque  
**Stacy Timmons**, Socorro  
**Bob Wessely**, Las Vegas  
**Katherine Yuhás**, Albuquerque  
**Kate Zeigler**, Albuquerque

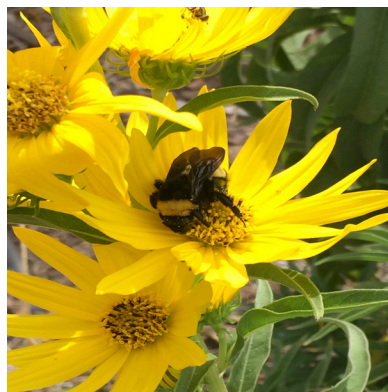
**Layout, editing, photos:**  
Kathy Grassel

**Website:** [www.nmwaterdialogue.org](http://www.nmwaterdialogue.org)

Copyright ©2019. All rights reserved.

Send comments and letters to:  
Consuelo Bokum, Editor  
New Mexico Water Dialogue  
1300 Canyon Rd.

Santa Fe, New Mexico 87501  
Email: [consuelobokum@gmail.com](mailto:consuelobokum@gmail.com)



## Report from the President

*By Jason John*  
*President, Board of Directors*

I have worked in water resources since 2001 and have experienced New Mexico water planning since that time. I have seen a lot of accomplishments in water development and continued struggles for many communities.

In 2020, there is the potential to complete the Cutter Lateral of the Navajo-Gallup Water Supply Project in northwest New Mexico. This is one of several regional projects in New Mexico and one of several funded through water rights settlement agreements. This project will allow water stored in Navajo Reservoir to flow to several communities to replace or augment existing groundwater supplies. It has taken a lot of coordination between the local communities, utility companies, tribal governments, state agencies, federal agencies and others to get to this point and there is additional work to make the project successful.

The theme of the upcoming Annual

Meeting on January 9, 2019 is “Building Water Resilience for New Mexico Communities.” Many communities throughout the state continue to seek assistance to add additional water supplies, replace deteriorating infrastructure and/or expand their systems to accommodate new water users.

There is a constant challenge for many of the water systems to secure reliable water supplies. For many of the smaller water systems, the options for revenue and trained, certified operators are limited. The potential solutions for these water systems to be resilient in order to be sustainable need to be discussed at the local, regional and state level. The State Water Plan and Regional Water Plans were recently updated and the potential solutions in those plans should be revisited and updated by all the stakeholders. I look forward to meeting all of you to discuss our most important natural resource in January.

***Save the Date:***  
***JANUARY 9, 2020***  
***New Mexico Water Dialogue***  
***26th Annual Statewide Meeting***

**T**hanks to a very generous donation, the Dialogue is able to offer student scholarships to attend the Annual Meeting on Jan. 9. To request more information, please contact [consuelobokum@gmail.com](mailto:consuelobokum@gmail.com) or any of our board members. Many thanks to our generous supporters!



New Mexico Water Dialogue 26<sup>th</sup> Annual Meeting  
**Building Water Resilience for New Mexico Communities**

January 9, 2020, 8:00 am to 4:30 pm

Indian Pueblo Cultural Center, 2401 12th St. NW, Albuquerque, NM 87104

**DRAFT AGENDA**

- 8:00 – 8:30 Registration
- 8:30 to 8:45 **Welcome and Introductions** – **Jason John**, President, New Mexico Water Dialogue and **Lucy Moore**, Facilitator and Co-Founder of the New Mexico Water Dialogue
- 8:45 – 10:00 **Keynote Speakers:**  
**David Gutzler**, Professor, Department of Earth Sciences, UNM: “How Clear is the Climate Change Crystal Ball?”  
**Melinda Harm Benson**, Associate Professor, Department of Geography and Environmental Studies, UNM: “Resilience as a Lens for Governance”
- 10:00 – 10:20 Break
- 10:20 – 11:30 **Panel: Science-Based Planning for Resilience**  
**John Fleck**, Professor, NM Water Resources Program, UNM  
**Stacy Timmons**, Hydrogeology Program Manager, NM Bureau of Geology and Mineral Resources  
**Daryl Vigil**, Water Administrator, Jicarilla Apache Tribe
- 11:30 – 12:00 **Representative Melanie Stansbury**, “Emerging Policy Priorities”
- 12:00- 1:00 Lunch
- 1:00 – 1:15 **Lucy Moore**, Board Nominations
- 1:15 – 3:15 **Panel: Resilient Water Management in Practice**  
**Paula Garcia**, Executive Director, NM Acequia Association  
**Phil King**, Professor, Civil Engineering Department, NMSU  
**Holly Richter**, Arizona Water Projects Director, The Nature Conservancy
- 3:15 - 3:30 Break
- 3:30 - 4:15 **Rolf Schmidt-Petersen**, Director, Interstate Stream Commission
- 4:15: 4:30 **Comments from the Floor**
- 4:30 **Adjourn**

The New Mexico Water Dialogue is a grassroots, non-profit, volunteer organization. Dialogue at our annual meeting is important. We keep our fees low to enable people to attend. We are thankful to the Indian Pueblo Cultural Center, where we have held all of our annual meetings, for helping us keep the costs of the meetings low. We also thank our sponsors and partners San Augustin Water Coalition, Audubon Society of New Mexico, Elephant Butte Irrigation District, the Nature Conservancy, and Daniel B. Stephens for the ads that appear below, which help to cover our costs for the year.

---

# The Nature Conservancy



nature.org

---



# Audubon | NEW MEXICO

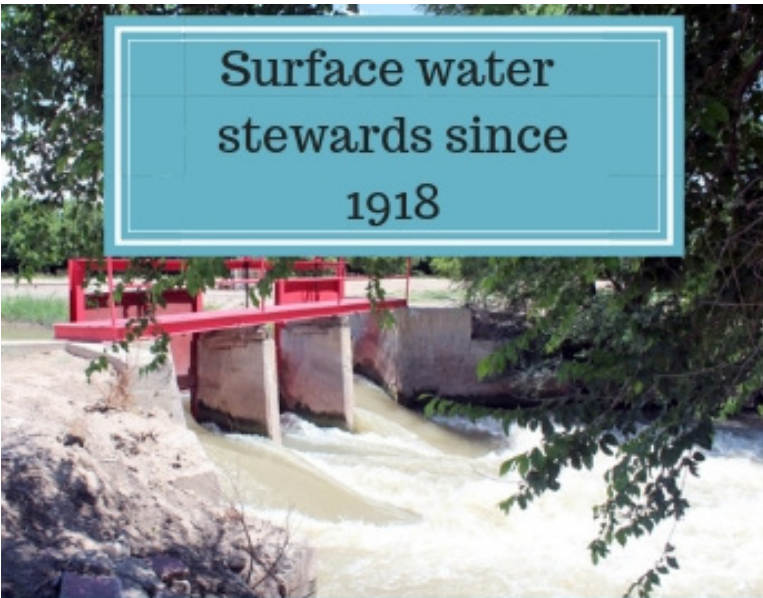
sawcfight@gmail.com  
575-772-5850  
website sawcnm.org

## San Augustin Water Coalition


Supporting Conservation and Preservation  
in Catron and Socorro Counties since 2007








Surface water  
stewards since  
1918



Providing professional  
and efficient water  
delivery to our  
farmer members for  
over 100 years.  
[www.ebid-nm.org](http://www.ebid-nm.org)



***Daniel B. Stephens  
& Associates, Inc.***



**New Mexico Water Dialogue  
26th Annual Meeting  
January 9, 2020**



**8:00 am to 4:30 pm**

**Indian Pueblo Cultural Center**

**2401 12th St. NW, Albuquerque, NM 87104**

## **Building Water Resilience for New Mexico Communities**

The simplest way to register for the 26th Annual Statewide Meeting is to go online to <http://nmwaterdialogue.org> and click on the "Register Now" button. Credit cards can be used online only. Registration includes lunch catered by the Indian Pueblo Cultural Center and morning and afternoon beverages and snacks. By registering early, you help us plan for these items. Scholarships are available to full-time students. Alternatively, you may fill out this form and mail it with a check to NMWD, c/o Consuelo Bokum, 1300 Canyon Rd., Santa Fe, New Mexico. The fee after January 6, 2020 is \$70 and must be paid at the door on the day of the meeting.

### **Registration Form (Please print legibly)**

NAME(S) \_\_\_\_\_

ORGANIZATION (optional, except for purchase orders) \_\_\_\_\_

TITLE OR POSITION (optional) \_\_\_\_\_

ADDRESS (street or box number) \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_

EMAIL ADDRESS: \_\_\_\_\_ PHONE \_\_\_\_\_

I/we wish to:

- ☐ REGISTER for the Dialogue's 26th Annual Statewide Meeting  
 \_\_\_\_\_ member(s): \$55 until 12/16/19; \$60 until 1/6/20 (\$60 hereafter)  
 \_\_\_\_\_ non-member(s): \$65 until 1/6/20

Amount included: \$ \_\_\_\_\_

- ☐ BECOME A MEMBER of the NM Water Dialogue (Register for the meeting as a member!).

\_\_\_\_\_ Individual(s) @ \$20  
 \_\_\_\_\_ Organization @ \$50

Amount included: \$ \_\_\_\_\_

- ☐ MAKE A TAX-DEDUCTIBLE CONTRIBUTION to the Dialogue

Amount included: \$ \_\_\_\_\_

Payment options:

- ☐ A check is enclosed  
☐ Invoice our P.O. # \_\_\_\_\_ for \$ \_\_\_\_\_.  
☐ Payment if being mailed separately (must arrive by the date indicated above)  
☐ I (we) will pay \$70 at the door.