

DESERT WATERS INTERNATIONAL SYMPOSIUM

Summary of
Proceedings



2019

Background

The Desert Waters International Symposium convened internationally-recognized thought leaders and water experts from across the Colorado River Basin (CRB) in the U.S. and Mexico, and from Australia's Murray-Darling Basin (MDB). More than 25 presenters and 100 audience members participated in this two-day symposium, held in Tucson at the University of Arizona (UA) by the Sky Island Alliance, Water Resources Research Center (WRRRC), and the University of Adelaide, funded by the Nina Mason Pulliam Charitable Trust. Many people and water-use sectors depend on scarce water supplies in the growing arid and semi-arid regions around the world, but natural areas - including the plants and animals that rely on the presence of water - are often the "forgotten sector." Ideas and lessons from our international neighbors can help Arizona reframe the link between healthy watersheds and healthy, thriving businesses and communities. This Symposium was a chance for experts and practitioners from Arizona to South Australia to converge in contemplation of a vastly complex and multi-faceted topic: how to balance social and economic water demands while considering and providing water for natural areas.

The Symposium began by honoring the memory of Mr Rodney Lewis of the Gila River Indian Community, who passed away on April 10, 2018. Mr Lewis was the first Native American admitted to the Arizona State Bar in 1972 and the first Native American to argue a case before the United States Supreme Court. He negotiated the Arizona Water Rights Settlement Act of 2004, supported water education and communication, and served as an advisory committee member for the Desert Waters International Symposium. Governor Stephen Roe Lewis, Mr Lewis' son, opened the Symposium by reflecting on his father's tireless support, expertise, and friendship that was provided to countless individuals and causes during his lifetime. Mr Lewis' wife, Willardene Pratt Lewis, and his daughter, Katherine Elizabeth Lewis, also attended the opening of the Symposium, which included heartfelt comments from Karen Francis-Begay, UA Assistant Vice President for Tribal Relations, a deeply touching song from Jesse Navarro, Government and Community Relations Program Coordinator, and a stirring honor song by the Wildcat Nation Drum Group, led by UA student Isaac Desjarlais. This opening set the tone for the Symposium and has carried throughout many subsequent discussions.

Mr Lewis' legacy provides firm footing and inspiration for what can be achieved in water management. The intention of convening the Symposium was to catalyze leaps forward in water resources policy and practice, just as Mr Rodney Lewis did throughout his lifetime. With this legacy in mind, the Symposium and following actions were structured with the intention to influence the CRB water agenda, with big ideas from the Symposium being tested immediately afterwards in a Think Tank event, and then presented the next day to the local Santa Cruz Watershed Collaboration.

Water For All In A Rapidly Changing World

Speakers

Brooke Bushman, The Nature Conservancy
James Callegary, USGS
Tom Rooney, Waterfind Global
Karletta Chief, UA Soil, Water and Environmental Sciences
Maria Dadgar, Inter Tribal Council of Arizona
Peter Duggin, Renmark Irrigation Trust
Benjamin Fee, University of Adelaide
Karl Flessa, UA Geosciences
John Ford, The Nature Conservancy
George Frisvold, UA College of Agriculture and Life Sciences
Michael Hanemann, Arizona State University
Gregg Garfin, UA Natural Resources and the Environment
Sharon B. Megdal, UA WRRRC
Deborah Nias, Murray-Darling Wetlands Working Group Ltd
David Groenfeldt, Water-Culture Institute
Matthew Payne, WestWater Research
Kathy Jacobs, UA Center for Climate Adaptation Science and Solutions
Sarah Porter, Arizona State University
Bailey Kennett, Arizona Land & Water Trust
Amy McCoy, Martin & McCoy LLC
Kelly Mott Lacroix, US Forest Service
Tim Thomure, Tucson Water
Grant Rigney, Ngarrindjeri Regional Authority
Brian Richter, Sustainable Waters
Elia Tapia, UA WRRRC
Daryl Vigil, Colorado River Basin Ten Tribes Partnership
Brad Udall, Colorado State University
Claire Zucker, UA WRRRC

Symposium Summary

The Symposium highlighted the striking similarities in issues being faced by both the CRB and MDB, including extreme drought, soaring temperatures, long-term challenges due to climate change, and institutional inertia. However, it was the vastly different approaches to solving these issues across nations, and the opportunities to influence change, that were central to exchanges between water experts, thought leaders and audience members throughout the Symposium.

Sessions included rapid-fire five-minute presentations that covered the policy, science, economic and cultural complexities faced in managing our water resources sustainably (the Symposium Agenda and highlights of the event can be accessed [here](#)). Session moderators and audience members probed presenters on current and future risks and opportunities, with all agreeing that water insecurity is a real and present danger and that existing policy and program settings are not adequately managing these risks.

The CRB Drought Contingency Plan and MDB Plan were highlighted as initiatives that have leveraged potential crises as calls to action. Both heralded positive steps in the right direction but are equally facing issues: the Drought Contingency Plan does not directly address environmental concerns; and implementation of the MDB Plan has seen significant challenges. In the face of future crises, water managers need to be ready with a package of policies and programs that learn from these and other initiatives. Some of these initiatives will be explored in upcoming white papers, but for now, key themes from the Symposium are summarized below.

Key themes

Without a doubt, the opening tribute to Mr Rod Lewis set the tone for the Symposium – this centered around ‘connecting the head to the heart’ by being clear on values, acknowledging facts and different perspectives, and developing trusted relationships.

Key themes that emerged were:

1. There is an urgent need for intensified and ongoing collaboration across sectors to identify shared water resources management values that acknowledge different interests and the shortcomings of previous initiatives. These shared values will form the foundation for **shared plans that place regions at the ready to exploit opportunities** brought about by inevitable future water crises.
2. Science must look to match and stimulate public interest in order to influence policy making and public choice in a timely manner. This requires a shift from process-driven to **values-based and future-looking science communication**, with an emphasis on connecting communities, leaders, and influencers to science-based advice.
3. Initiatives must necessarily **dare to be big**, with wide ranging implications, that create concrete steps that are **difficult to erode**. Big initiatives that can be tested at a local scale can form powerful pilot studies.

4. Taking bold actions (such as legally connecting surface and groundwater in Arizona, redefining water rights to include the environment, addressing sources of conflict in water use, and establishing connected and highly utilized water markets) requires strong leadership and championing – there is a **need to coordinate leadership and identify water champions**, then arm them with coordinated, robust propositions.
5. A more **sophisticated and ‘joined-up’ approach to community and institutions** is required to infiltrate and influence the water agenda. There is a need to develop stronger links between local, state and national institutions – these linkages pave the pathway to influence and to demonstrate wins at the local scale that have potential for broader application.

Moving forward

The 2019 Desert Waters International Symposium laid the foundation for a more collaborative pathway forward for water resources management in the CRB and MDB. Central themes from the Symposium and Think Tank have been captured in this document; the local, state and national scales are connecting through the local Santa Cruz Watershed Collaborative and water experts across the US and Australia; and a series of White Papers will be developed with input from Symposium participants and key institutions and influencers.

In the absence of ongoing collaborative effort, key themes repeated throughout the Symposium, including the importance of relationships and having a plan at the ready, will not be realized. The process outlined above will help Symposium attendees to set the agenda based on values, trusted relationships, and a clear action plan to skillfully influence the power base. In light of projected impacts of our rapidly changing climate, this process needs swift attention and action if we want to pass on precious resources and places to next generations. We are already seeing local consideration of concrete options to support water resilience, such as connecting groundwater and surface water, through the Santa Cruz Watershed Collaborative. They will need support – there will be challenges and it will take time ... but the impacts could be far-reaching, including progressing the hard-fought legacy of water leaders such as Mr. Rodney Lewis.

Applying Lessons

Let us know if you are interested in collaborating on the following white paper topics spurred by the symposium:

- What can we learn from policy shortcomings in the CRB and MDB?
- Map ‘water influencers’ across the Colorado River Basin
- Test the feasibility of legally connecting surface water and groundwater
- Explore economic benefits of recognizing environmental water rights in the CRB
- Other emerging themes and considerations around securing water for natural areas.

This summary paper captures the essence of what occurred at the Symposium and subsequent events. A series of white papers focusing on specific policies and projects will soon be released for comment, each with an aim to create a groundswell for future action. We hope that you too are excited by what is still to come from the 2019 Desert Waters International Symposium.