

Elements of Resilient Water Policy: A Selective and Informal History of the Utton Transboundary Resource Center’s Approach to Supporting Water Resiliency

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Marilyn O’Leary is the founding director of the Utton Transboundary Resources Center at the University of New Mexico School of Law. While at the Center, she focused on bringing together water experts of diverse backgrounds to work together to better manage shared water resources. Prior to her work at the Utton Center, she practiced in the areas of water law and public utility regulation in both the public and private sectors. She received her JD from the University of New Mexico School of Law.



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Marilyn C. O’Leary

Drought

*The less water, the more tears
until there can be no more tears,
only dust.*

*The helplessness of drought —
furrowed rows, expectant,
blown to flatness.*

*Sand scratches on the tin roof
pits the window pane —
spider webs appear, but no
drops of dew hover on the filaments.*

Dry lightning ignites flames.

Where is the water to quench this fire?

The river is dry.

We have built our homes on sand.

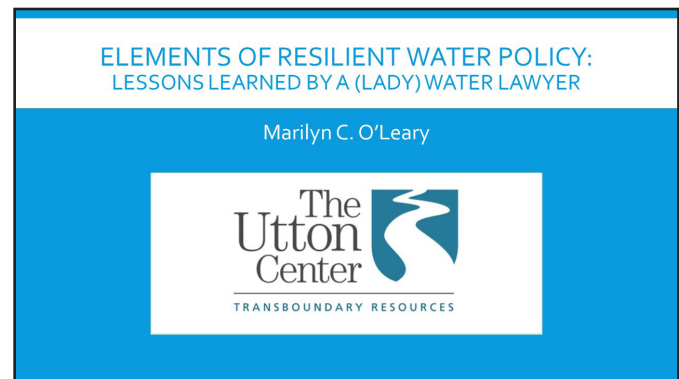


Figure 1. Introduction.



Figure 2. Drought, Storrie Lake with very little water, Las Vegas, NM, May 2012.

Introduction

Although I was a poet before becoming a lawyer, I didn't want to share my poetry with my legal colleagues. I'm a lawyer, I thought, not a poet. However, it was a mistake to not include certain parts of myself in my work. One of the things I learned over the years of teaching and practicing law was when we bring all of our talents and qualities to what we do, the result is a better product.

What is true for individuals is true for groups. It is also true for planning for resilience. Bringing the totality of the best we have supports better policy crafting and decision-making including sustainable, even resilient, water management. Inclusivity is key to the ability to effective collaboration across disciplines, and collaboration is critical to effective and resilient water policy.

During my tenure as director of the Utton Transboundary Resources Center at the University of New Mexico School of Law, our work focused on supporting multidisciplinary collaboration and approaches to water management and policy development. We were committed to bringing people of diverse academic and cultural backgrounds together to learn from each other and provide synergy to problem solving. Anyone who deals with management knows how critical this approach is: it fosters better solutions that result in more resilient water management.

Understanding the importance of collaboration among experts with different backgrounds came early in my legal career, when I was an attorney at the New Mexico Public Utility Commission and was made the Executive Director. The head of every department had applied for the position of Executive Director: engineering, law, accounting, economics. All of the men were more experienced in utility regulation than I. I hired an organizational consultant to help with team building. He helped us see how each person's skills and approaches benefitted the rest of the



Figure 3. The whole band.



Figure 4. Teamwork can work (<http://www.sbnation.com/2016/8/6/12266644/2016-rio-summer-olympics-volleyball-schedule-time-tv-schedule-watch-online-usa-puerto-rico>).

team. The lawyers wanted to go immediately to the solution, while the engineers said we first had to understand the problem. This team building exercise clarified the importance of collaborating and building on diverse talents and strengths (Figure 3 and 4).

Since that time studies have shown that including people of diverse backgrounds results in more effective solutions. We now know that various approaches to a problem makes for more creative problem solving.

New Mexico has a number of elements to support multifaceted, creative problem solving.

- We are welcoming; we have the mother road, Route 66, going through the middle of the state (Figure 5).
- New Mexico is home to a number of nationally-recognized research and educational institutions: the University of New Mexico, New Mexico State University and its Water Resources Research Institute, New Mexico Institute of Mining and Technology, Sandia and Los Alamos National Laboratories (Figure 6).
- We have historic cultural resources relating to water: Pueblo styles of water management and the Spanish acequia system (Figure 7).
- Our people and backgrounds are diverse (Figure 8).

We rely on abundant natural resources that have provided us extractive and renewable energy sources and industries.

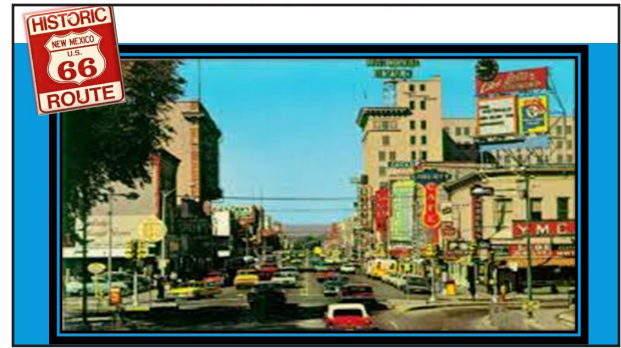


Figure 5. Route 66.

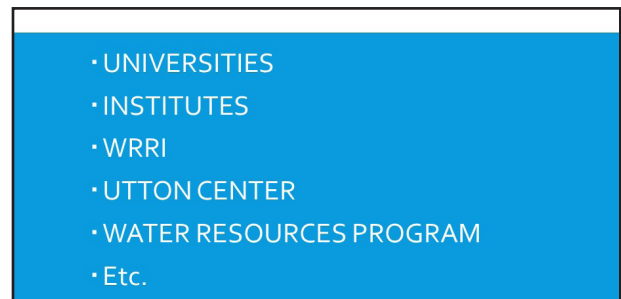


Figure 6. Research.



Figure 7. Cultural resources.

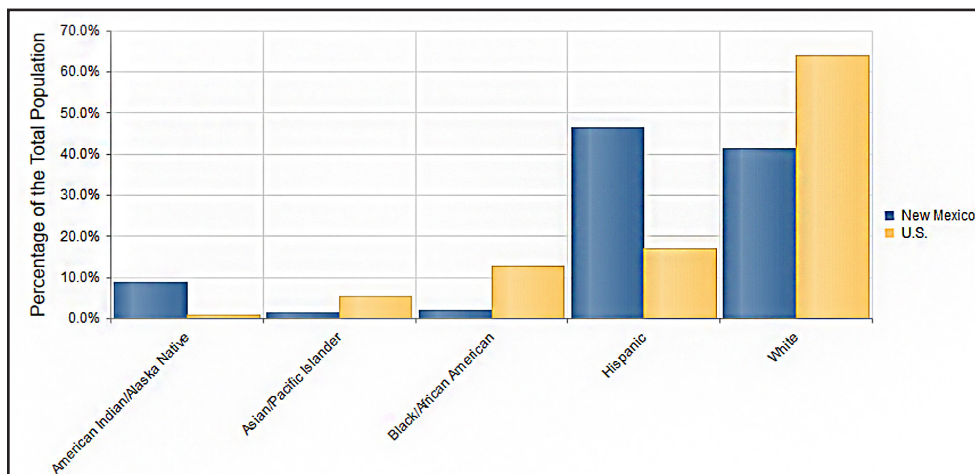


Figure 8. Population distribution by race/ethnicity in New Mexico and U.S. in 2014.

Because most water problems are multi-layered and multi-jurisdictional, in my years at the Utton Center we promoted different foci for bringing water experts together.

Utton Center Projects Supporting Collaboration (Figure 9)

1. *Crossing Boundaries for Sustainable Solutions, a Multidisciplinary Approach*, 2003

The purpose of this conference was to explore differences in how experts with various backgrounds approach water problems. Lawyers, economists, engineers, social scientists, climatologists, hydrologists, biologists, policy-makers, and ecologists participated. They were divided into multidisciplinary teams and given a complex hypothetical scenario. The question was posed: What do you need to know to resolve the issues? What would you do first? An attorney shocked the engineers and scientists by answering: "First I have to know whom I represent. What's best for my clients? How can I minimize the pain for all concerned?" The process addressed going from litigation to negotiation to consensus agreements and around again. It became clear how important it is to understand how other experts approach problem solving.

Discussion included the role of politics: values, pragmatism, and expediency. An agency head asserted that science cannot bring values, but politics can and does.

After working through these different scenarios with each other over a week, the consensus was that a regional governmental entity is not needed, but a regional perspective surely is. The watershed approach to water management, with its early proponent John Wesley Powell, is still seen as the most sustainable and resilient approach.

2. *Crossing Cultural Boundaries for Sustainable Solutions, a Multicultural Approach*, 2005

This conference focused on negotiating Native American water rights settlements. It was held at the Tamaya Resort on Santa Ana Pueblo land. This Pueblo is one of nineteen pueblos in New Mexico that have had settlements on the Rio Grande or its tributaries since the 1500s. Participants discussed the importance of longevity, respect, and persistence in crafting settlements. They then

- **The Snowbird Conference (October 2002)**
First Utton Center conference on Law, Science and Water
- **The Tamaya Conference (September 2004)**
Transboundary Waters: Settling Indian Water Rights Claims
- **The Resilience Conference (October 2014)**
Exploring Resilient Water Law and Policy Options



Figure 9. Collaborative conferences.

were invited to attend a feast day celebration and harvest dance at Acoma Pueblo, a pueblo more than 800 years old known for its remarkable setting atop a dramatic mesa. Those who had never seen a pueblo feast day were astonished at the beauty and complexity of the ceremony and the generosity of the Acoma people.

3. *Water Resilience in a Time of Uncertainty*, 2014

The most recent Utton Center conference focused on water resilience. Resilience is the capacity to adapt to environmental and social conditions different from those that existed when current laws and infrastructure were created. If a system can absorb disturbances and still maintain its functions and structure, it is resilient. If it cannot adapt to changing conditions, it is not resilient.

National and state experts gave presentations on how law, engineering, biology, economics, and other fields could support resilience. In addition, one half day of the conference was spent with Professor Aaron Wolf, director of Oregon State University's Program in Water Conflict Management and Transformation. Professor Wolf led an experiential exercise on the critical role of listening in resolving water conflicts. Participants experienced the difficulty of hearing someone with different values. They then saw that it was easier to resolve issues when the listener listens with attention and an open mind. The speaker found that they could speak with more clarity when listened to carefully.

The conference addressed the issue that, when negotiating difficult issues, we ignore values, including our own, at our peril. Values provide a filter to what is perceived, whether or not the perceiver is aware of them. Acknowledging one's own values allows an individual to understand the role values play in hearing others, including the making of value-based judgments and conclusions.

The role of process is as important as bringing one's expertise and experience to bear (Figure 10). Adequate process is key to a participant's feeling of being heard. In the requirement of due process, the American legal system recognizes the critical role of providing notice and the ability to be heard in assuring the protection of rights. These requirements are the minimum requirements needed when constructing a process to include stakeholders in decision-making.

4. *The Utton Center Model Interstate Water Compact*, published in 2009

The Utton Center Model Interstate Water Compact is a useful tool for water policy makers who are drafting or trying to resolve conflicts related to water agreements. Although it is written as a comprehensive, unified agreement, it can be used as a menu of ideas for crafting agreements or settling disputes among joint water users.

The Model Compact was created in consultation with national and international experts in the field of water law, policy, and management. It includes specific provisions related to cooperation among political/jurisdictional entities. The Compact recognizes the importance of cooperation and collaboration among federal, state, tribal, and local interagency water users to the effectiveness of any interstate agreement.

The Utton Center Model Compact requires real inclusion and involvement of stakeholders, looking to residents to resolve future problems within a basin. The Model Compact states, "In essence, the allocation and management of Basin water resources involves nothing less than the active participation of all impacted stakeholders." It has been noted that the process is as important as any result. The process includes consideration of values, inclusion of stakeholders, and personal integration.

Colorado Water Planning

The State of Colorado's water plan is worth noting both for its innovative ideas and for the processes it provides in allowing for true stakeholder involvement. It is a multilayered process providing for input at all levels (Figure 11).

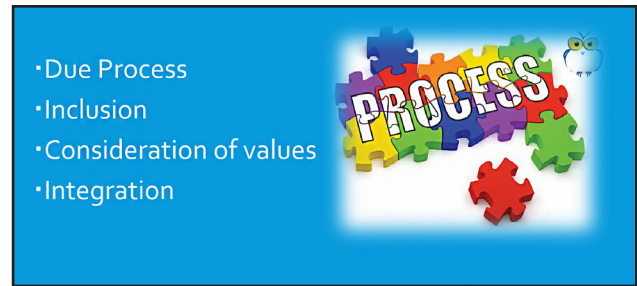


Figure 10. The importance of process.

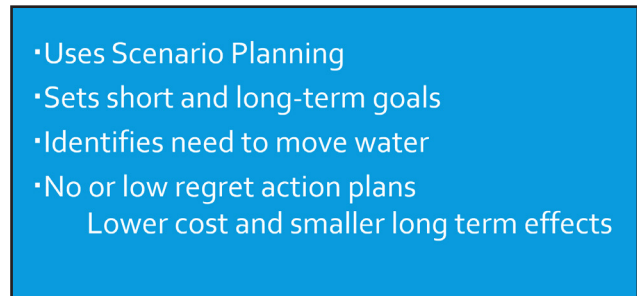


Figure 11. Colorado water plan (<https://cwcb.colorado.gov/colorado-water-plan>).

Some notable ideas in the plan include the following:

1. The use of scenario planning, that is, planning for multiple needs given uncertainty and the need to easily redistribute water where it is needed most.
2. The setting of short- and long-term goals. Conservation, reuse, and completion of planned projects are examples of short-term goals. The possibility of a large trans-mountain diversion is an example of a long-term goal.
3. Identifying future needs to move water, that is, identifying water gaps and creating solutions to fill the gaps.
4. Possible implementation of No or Low Regret Action plans, that is, plans that come with little controversy or little cost and are preferable to costly, inflexible solutions. Examples include measuring supply and demand and facilitating communication between groups.

The approaches discussed could well be used to make New Mexico's water planning more effective, resulting in a more resilient water policy (Figure 12).

New Mexico Law

The role of the law is critical in resolving water disputes. The law provides a stick, a structure, and framework (Figure 13). New Mexico law, though relatively sparse, is nevertheless relatively old and well-established. New Mexico's water statute dates back to 1907. Its water law recognizes the

connection between ground and surface water, a recognition of hydrologic reality ignored by some other western state's water statutes. New Mexico's approach has avoided confusion other states are still dealing with in their water decisions.

The New Mexico court system includes water judges. Each New Mexico judicial district has a water adjudication section with a water judge designated by the New Mexico Supreme Court (Figure 14). Water judges serve for an extended period of time. The purpose of this system is to develop expertise and consistency in decisions related to water.

*"Resiliency is part of the identity of New Mexicans,
just as drought is part of our semi-arid climate." Chapter One*

- The New Mexico Office of the State Engineer and Interstate Stream Commission are required to undertake a review of the New Mexico State Water Plan every five years and to subsequently update the plan as needed pursuant to the State Water Plan Act.
- Review began in 2013. It serves as the foundation for the State Water Planning and Regional Planning Program updates
- Regional plans are in draft form and available for public comment at:
http://www.ose.state.nm.us/Planning/regional_planning.php

Figure 12. New Mexico water plan (<https://www.ose.state.nm.us/Planning/>).

- STICK
- FRAMEWORK
- STRUCTURE
- NEW MEXICO LAW
 - Recognizes the connection between surface water and groundwater.
 - Old law – predates statehood (January 6, 1912)
 - Water Judges



Figure 13. The importance of the law.

- Each NM judicial district has a water adjudication section with a water judge.
- Judges are designated by the New Mexico Supreme Court.
- The purpose is to develop expertize and consistency in decision making.

Figure 14. New Mexico water judges.

Recommendations

Finally, here are my recommendations for water managers and policy makers to support water resilience (Figure 15).

Be willing to consider new approaches in developing water policy. Examples of new approaches are the Model Interstate Water Compact and Colorado’s water planning process.

Commit to collaborate across disciplines. Utilize multidisciplinary expertise. Recognize polycentric management.

Respect and commit to diversity and inclusion. This means recognize the importance of values, including your own.

- Be willing to consider new approaches
- Commit to collaborate across disciplines
- Respect and commit to diversity and inclusion
 - Polycentric organization
 - Role of experts and agreed upon facts
 - Stakeholders
- Bring your whole band to play

Figure 15. Recommendations.

