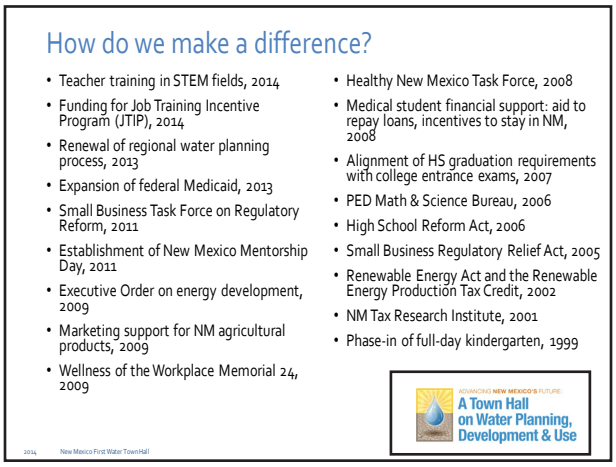
Water: What Can Our Future Hold?

Heather W. Balas, New Mexico First

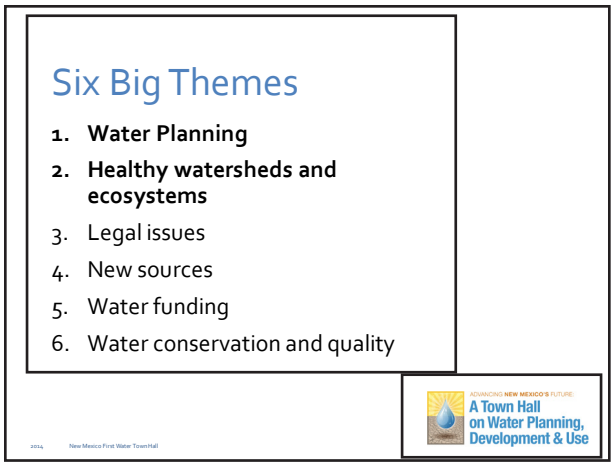
Heather W. Balas is President and Executive Director of New Mexico First, a public policy organization that engages people in important issue facing their state or community. Established in 1986, it offers unique town halls and forums that create recommendations for policymakers and the public. A fifth-generation New Mexican, Heather has over 20 years of experience in public policy, including citizen outreach, voter education, coalition-building, and policy research. She worked in Washington, DC and San Francisco for several years before returning to her home state. Previous employers include the Commission on Presidential Debates, the California Center for Civic Participation, the Henry J. Kaiser Family Foundation, and the National Network for Youth. She holds a master's degree in political communication from the University of Maryland. Heather is married and is a mom to two busy children.

Editor's Note: In lieu of the presentation transcript, we have included selections from the New Mexico First 2014 final report entitled, *Water: A Town Hall on Water Planning, Development and Use, 2014,* with permission from the author to accompany the speaker's slide presentation.



How Do We Make a Difference?

From improved preparation for math and science teachers, to small business tax credits, to expansion of Medicaid to provide health insurance for more New Mexicans, New Mexico First advancement of town hall priorities makes a difference in this state.



REALLY PLAN FOR THE FUTURE

Town hall participants are deeply concerned about water shortages and future droughts. They see long-term, common sense water planning as a key tool, so they strongly champion existing state and regional planning efforts. However, they want a planning process that does not sit on a shelf. Integration of economic development, agriculture, land-use and transportation plans are seen as essential to smart water policy. Participants believe our water supply must be resilient – even in emergencies. To achieve that resiliency, communities must adapt in the face of crisis. They need tools and education to do that hard work in advance. Lastly, communities, regions or tribes cannot solve water supply problems on their own. Everyone must collaborate more.

RECOMMENDATION 1: Improve State and Regional Water Plans

Action: Strengthen the regional and state water planning and implementation process to promote long-term planning, while maintaining short-term adaptability.

Strategies:

- Achieve consistent, dedicated funding for water planning.
- Revise regional water plans so they are internally consistent and integrated into the State Water Plan.
- Utilize best available science to improve water supply forecasts.
- Create the necessary mechanism to ensure successful implementation of regional water plans.
- Integrate public water supply and sanitation planning with the separate planning processes for agriculture/ land use, transportation and economic development. Promote water conservation and healthy ecosystems within all those efforts.

Level of Support: 97%

RECOMMENDATION 2: Make Our Water Supply Resilient and Flexible

Action: Ensure that water supply systems are resilient and flexible, adapting to short-term and long-term water shortages.

Strategies:

- Create emergency action plans and tools capable of rapid response to a water supply crisis.
- Use the regional water plans to prioritize water initiative funding.
- Prioritize financing for water initiatives that provide flexibility, quantifiable impacts and accountability.
- Develop and fund planning tools, such as data, interactive water budgets, as well as aquifer characterization and modeling for water planning purposes.
- Build community capacity for long-term resiliency by providing essential resources to people in local governance and water management (leadership training, technical support, access to experts, etc.)

Level of Support: 95%

RECOMMENDATION 3: Plan for Extreme Droughts

Action: Plan for extreme variations in precipitation, recognizing that water is precious, supplies are highly variable, and that our current drought situation may not be temporary.

Strategies:

- Convene representatives from tribes, land grants and 16 water plan regions annually to discuss their water situation and needs. This information will help New Mexico balance overall usage and avoid overextending water resources.
- Create statewide expert panels to inform regions on costs, benefits, legal limitations and implementation considerations on specific issues that are common to many regions (i.e., agriculture and municipal conservation, watersheds, etc.).
- Ensure that aquifer contamination and depletion are addressed in water planning.
- Develop a K-12 curriculum and smart phone app that engages students in thinking about short and long-term water planning.
- Advance public acceptance of the need to balance renewable water supply and demand.
- Address the problem of planning for continued growth planning; consider a no-growth scenario.

Level of Support: 91%

RECOMMENDATION 4: Restore Watersheds

Action: Fund and implement long term, collaborative, comprehensive watershed-scale restoration projects to foster healthy ecosystem function and resilience.

Strategies:

- Thin forests to reduce catastrophic fires and increase water supply.
- Include all interested parties (e.g., land owners, communities and regional, state or federal agencies), and increase coordination between those stakeholders and funders.
- Use the New Mexico Forest and Watershed Health Plan as a resource for communicating to policymakers.
- Promote land management policies that retain access to public lands for purposes of restoration of forests and watersheds (i.e., access to road-less areas, keeping existing roads available, or federal activities that would prevent access).
- Integrate efforts with the current U.S. Forest Service Rule Revision process.
- Expand state water planning to specifically include protecting and improving watersheds.
- Develop a system to evaluate and track overall progress on watershed restoration.

Level of Support: 97%

RECOMMENDATION 5: Protect Against Wildfire and Water Source Loss

Action: Create a 20-year wildfire and water source protection plan, and establish sustainable funding that leverages federal, local and private resources for watershed-scale restoration.

Stategies:

- Produce and publicize an annual watershed report card that:
- Offers achievable goals
- Assesses the acreage at risk in key watersheds for loss due to catastrophic fire over a 20-year period
- Documents and promotes water management success stories
- Provide incentives to leverage resources for watershed scale implementation (e.g., tax incentive for projects that use NM forestry products, fund research on low quality wood, tax credits for National Environmental Policy Act analyses by firms).
- Base the relationship between the NM Office of the State Engineer and the U.S. Forest Service on the Organic Administration Act, and implement its intent through the NM State Water Plan and the NM Watershed Health Plan.
- Take legislative action to promote prescribed fires, change policy to permit fires to burn and give private landowners indemnity from liability if they follow prescribed burn prescriptions.
- Emphasize that water is a driving economic force.

Level of Support: 83%

RECOMMENDATION 6: Reduce Endangered Species Conflicts

Action: Reduce the incidence and impact of conflicts between endangered species and water users by proactively solving Endangered Species Act (ESA) issues.

Strategies:

- Balance actions that result in habitat improvement so that they benefit both the endangered species and other users.
- Advance projects that reduce likelihood of future ESA listings.
- Ensure peer review of the science, methodology and data.
- Increase community consultation to find and implement regional solutions.
- Develop and fund recovery programs.

Level of Support: 78%

This strategy was originally drafted by the town hall as part of Recommendation 2 on water supply resiliency.

The U.S. Forest Service Organic Administration Act is a foundational law governing the administration of national forest lands. Additional information is available at http://www.fs.fed.us/forestmanagement/aboutus/histperspective.shtml.

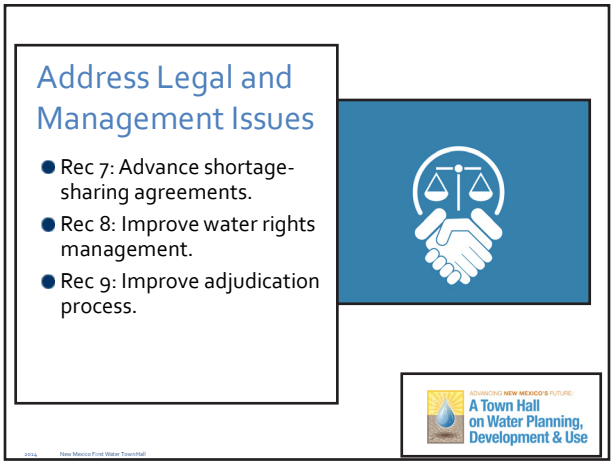
RECOMMENDATION 7: Advance Shortage-Sharing Agreements

Action: Promote, develop and implement water shortage-sharing agreements among water right owners at the local level to facilitate water allocations during times of shortage.

Strategies:

- Require and fund water-use measuring or metering to inform and implement agreements.
- Provide educational outreach regarding sharing agreements including use of the acequia model of "repartimiento" or sharing.
- Develop a template for sharing agreements.
- Create incentives for entities to enter into sharing agreement negotiations.
- Provide resources to implement Active Water Resource Management Initiatives in seven priority basins, and involve broad, local input into decision-making.

Level of support: 94%



RECOMMENDATION 8: Improve Water Rights Management

Action: Strengthen, coordinate and fund administration and management of surface and groundwater (both fresh and brackish).

Strategies:

- Incentivize conservation as well as negotiation on water sharing by building capacity for priority administration, evaluating the impact of priority administration and implementing Active Water Resource Management.
- Review and revise groundwater management rules and regulations to improve long-term viability of the resource and reduce depletion.
- Task and fund an appropriate entity to work with government agencies and academic partners to develop a knowledge-base of best available science and management practices for water shortage response and mitigation.
- Utilize the market, a fair and efficient water transfer process as well as other incentives to mitigate against shortage.
- Encourage the licensing of water rights.

Level of support: 88%

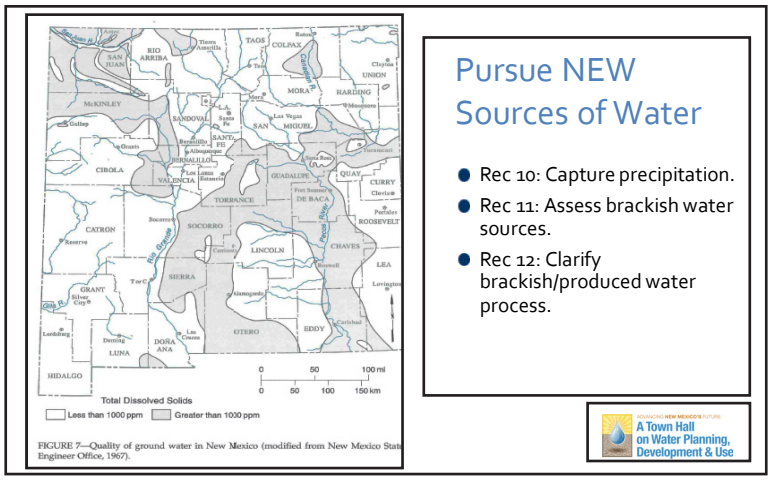
RECOMMENDATION 9: Improve Adjudication Process

Action: Increase the efficiency, timeliness and fairness of the adjudication process.

Strategies:

- Set target dates to promote settlements and completion of adjudications.
- Streamline procedures that cause delays in the adjudication process. (Build on 2009 Senate Joint Memorial 3 report.)
- Create incentives that make water right holders eager to be fully adjudicated.
- Promote negotiations to resolve differences during the hydrographic survey process.
- Increase state funding for the adjudication process overall, including for:
- NM Office of the State Engineer hydrographic survey staff, paralegals, attorneys and information dissemination
- Community water organizations and local governments to participate in the adjudication process
- Local water organizations to support and conduct hydrographic studies
- Adjudication courts
- Funding must be stable. Options include:
- A statewide water bond measure
- A return to general operations funds (rather than irrigation works construction funds)
- Allowing private funds to be used to complete adjudications
- Ensure that the state water plan update includes an assessment of funds required to complete adjudications.

Level of Support: 80%



The term "repartimiento" refers to the customary and cultural practice of sharing water. It is based on creating a culture of interdependence, particularly during times of shortage. In the New Mexico acequia community, the term refers specifically to the practice of sharing water between irrigators who share an acequia and also to the practice of sharing water between acequias who share a common source of water such as a stream or river.

- This strategy was originally drafted by the town hall as part of Recommendation 9 on the adjudication process.
- The report, Assessing Potential Changes to the New Mexico Water Rights Adjudication Process, was prepared in 2009 by the UNM law school.

PURSUE NEW SOURCES OF WATER

New Mexico currently uses more water than we take in. Our freshwater aquifers are depleting, and surface waters are also reduced due to prolonged drought. The town hall recommends exploring at least three new sources of water: precipitation capture, non-potable brackish water and "produced water" brought to the surface through oil and gas mining. The viability of these options varies, and some solutions might be used only for grey-water or agriculture. All three options require considerable legal and scientific research, regulatory change and potential legislation.

RECOMMENDATION 10: Capture Preciptation

Action: Capture and use precipitation to provide more water for beneficial use to offset natural loses and within existing compact limits.

Strategies:

- Initiate and fund new water supply and storage projects such as aquifer storage and recovery, reclaimed wastewater, brackish water, surface water storage, storm water capture and water delivery enhancement.
- Increase water harvesting through more efficient storm water management.
- Capture and channel water to recharge aquifers.
- Make more efficient use of existing dams, including berms.
- Apply rain capture practices to range management.

Level of Support: 90%

RECOMMENDATION 11: Assess Brackish Water Sources

Action: Evaluate the characteristics of brackish water sources (i.e., quality, quantity and locations throughout the state).

Strategies:

- Rank brackish water basins based on development potential according to state and regional water plans in order to expedite exploration and characterization plans.
- Fund statewide studies, programs and/or pilot projects coordinated by universities, national laboratories, the private sector and government agencies (e.g., U.S. Geological Survey, U.S. Department of Energy, U.S. Bureau of Reclamation, NM Office of the State Engineer and NM Energy, Minerals and Natural Resources Department - Bureau of Geology) to:
- Identify locations of brackish water aquifers
- Evaluate their hydrogeological and geochemical characteristics
- Evaluate discharge opportunities
- Evaluate the impacts of development, treatment or use based on their established rankings
- Establish a long-term educational component that includes the following:
- Fund collegiate water internships in state agencies
- Integrate university students in characterization and monitoring
- Expand Youth Conservation Corps participation in water projects
- Expand existing water educational opportunities
- Enhance the K12 curriculum on water issues

Level of Support: 91%

RECOMMENDATION 12: Clarify Brackish/ Produced Water Process

Action: Clarify or create consistent processes among appropriate regulatory agencies for: 1) use of brackish water and 2) use and re-use of produced water generated by oil and gas development.

Strategies:

- Review existing statutes, regulations and policies with public and private stakeholders to determine needed changes and to identify a one-stop-shop permitting approval process.
- Establish a coordinated process between state and federal entities to facilitate the development and use of brackish water.
- Allow extended temporary permitting of pilot brackish water supply developments.
- Evaluate the economic costs and benefits and environmental impacts of desalinated water to increase water resources.
- Allow development to increase the use and re-use of produced water.

Level of Support: 86%

This strategy was originally drafted by the town hall as part of Recommendation 2 on water resilience and supply.

IMPROVE WATER FUNDING POLICIES

There are many competing needs for water funding in New Mexico. Given the state's limited dollars, town hall participants want money spent as efficiently as possible. Existing funding structures appear to overlap and underutilize federal and private sources. The town hall urges increased integration and planning among funders, plus research on how to create a more unified funding system. In addition to how the state funds projects, the town hall focused on what should be prioritized. Investments in water resources and supply are a top priority. Furthermore, we must make sure that once new water projects are built, public investments are not squandered through poor management or lack of maintenance.

RECOMMENDATION 13: Invest Water Dollars Wisely

Action: Maximize investments in water resources, supply and related concerns.

Strategies:

- Increase investments in water source protection and restoration.
- Identify or create an entity to research and develop new funding mechanisms and sources and coordinate funding programs.
- Use assessment and development processes such as LEAP (Lifecycle, Effective Use of Public Funds, Appropriateness, Prioritize) to identify projects for public and private investment within a unified funding system.
- Improve the investment process to coordinate, publicize and provide technical, financial or managerial support for managing assets. (Examples of assets include dams, irrigation canals, water supply or treatment systems).
- Improve public-private partnerships to maximize investment in and funding for water-related projects.

Level of Support: 88%

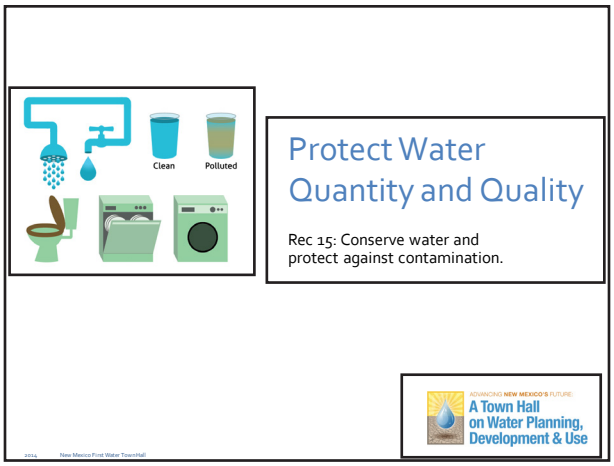
RECOMMENDATION 14: Expand Water Funding Sources

Action: Develop more sophisticated and diverse funding sources for vetted water projects that leverage public and private resources and expertise.

Strategies: Investigate and/or move forward with public-private partnerships, as well as pass enabling legislation or guiding principles for public-private partnerships.

- Identify and review use of new funding sources. (e.g., leveraging the market, general obligation bonds, irrigation works construction fund, Federal Emergency Management Agency fund, State Investment Council, etc.).
- Identify, establish and commit to an initial dollar amount for funding water projects (e.g., $250 million/year for five-years) and then, establish the recurring amount needed to fund the life of the projects (i.e., needs should be specifically outlined).
- Review and reform the funding process to ensure sustainable funding for the life of water projects including use of revolving loan programs, grants, user fees and leveraging federal funds.
- Monitor and evaluate funded water projects.

Level of Support: 88%



PROTECT WATER QUANTITY AND QUALITY

Water conservation is essential, particularly in a desert state. It is equally important, says the town hall, to guard against groundwater contamination and other sources of water pollution. Advancing these goals will require education, research and engagement by a wide range of stakeholders. From farmers to urban homeowners – as well as businesses, municipalities and policymakers – New Mexicans will have to collaborate in order to achieve water conservation and protection goals.

RECOMMENDATION 15: Conserve Water and Protect Against Contamination

Action: Protect water resources (supply and quality) through research-based conservation and reuse, policy change and collaboration.

Strategies:

- Create education for business, industry, agriculture, municipalities and residential water users that:
- Promotes water conservation
- Gives consideration to ethical management of water resources
- Promotes wastewater reuse
- Explores new water supplies
- Protects water quality
- Advance change in legislative and regulatory policy that: Promotes conservation by incentivizing and maximizing the efficient use of funding and public resources
- Ensures the statewide water plan maximizes economic opportunities, protects the environment, prevents pollution, gives consideration to future generations and simplifies public policy (while adhering to federal and state regulations as well as compact obligations).
- Protects local and regional water supplies

Level of Support: 88%