NINETEENTH New Mexico FIRST TOWN HALL

"Managing New Mexico Land and Water Resources for the Best Use: Now and Through 2020"
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How We Use Water and Land

Water and land are intrinsic to New Mexican life.

Water is the resource that has given New Mexico the ability to sustain life for many centuries. The Town Hall recognizes and celebrates the many New Mexican uses of water including agriculture and grazing, commerce and industry, recreation, domestic and municipal use, wildlife and environment, mining, military, religion and culture, tourism, fire suppression, and energy production, in both traditional and modern contexts, by all levels of federal, state, local, and tribal governments and the private sector.

Land has great meaning and value in New Mexico. Sacred Native American areas abound in our state. Farming, ranching, and traditional acequias provide community stability. Our cities are expanding as our families grow and as newcomers choose to make New Mexico home. Our state trust lands support public education and offer a laboratory for innovative land use planning, helping to preserve our state's quality of life in the long-term.

The Link Between Water and Land

The Town Hall recognizes that water and land are inextricably linked with each other, and that future planning and development should be integrated, although not necessarily governed at the same levels. Together, water and land are an essential part of the cultural, social, and economic fabric of New Mexico. In the case of water, this includes watersheds that encompass portions of other states and Mexico through shared aquifers, interstate river compacts, and treaties.

Many links between water and land were cited by the Town Hall. Those connections include the location and availability of water, Native American and other legal claims to land and water, zoning and subdivision laws and regulations, environmental protection issues, water conservation and quality, recreational uses of land and water, population growth/density, and traditional/cultural links between water and land. The State Engineer, the government official responsible for water administration, has a role in influencing land management by assuming the legal responsibility for validating water availability, including for new subdivisions, in New Mexico.

The Present and Future Use of Water and Land

The present and future use of water and land inevitably requires a balance of considerations, both in the allocation of resources and in the means to balance those considerations. Should the market control water and land management, or should a government-led process that emphasizes public opinion direct

management strategy? How much weight should noneconomic values be given? How should traditional uses of water and land and increased urban uses be balanced in the planning process? Should water allocated for the ecosystem be given equal status with economic use? Do water and land have intrinsic value separate from value created by human use? Does increased population necessarily compromise the quality of life, and how can water and land use planning allow for both? Should prior use necessarily mean priority of use? How does the amount of water that is legally appropriated compare with the amount that is actually available? How can public policy reconcile the need for conservation of water while maintaining the "use it or lose it" legal principle? The answers to these questions are seldom simple. The market place or economic value of water is only one way in which water is valued. Often, these values may be in conflict, in which case society has to decide which value is more important or how to reconcile those values.

The Town Hall uniformly cites the need for adequate data about New Mexico's water, particularly to quantify the supply, meter or otherwise quantify all uses, identify use without rights and non-use of abandoned rights, and proactively manage interstate stream commission compliance. All of these are required to ensure the satisfaction of the future need for water as New Mexico's population grows.

Water and land are finite resources. Although much is known about water usage in New Mexico, more information is needed on the extent of dependence upon domestic water wells and abandoned water rights. Significant uncertainty exists with regard to rights that may have been abandoned. With such uncertainty, planning is very difficult.

Planning for Water and Land Use

This Town Hall strongly and unequivocally recommends a comprehensive process of strategic planning, information, and communication at the regional, state, tribal, and local level with regard to broad-based water and land use. Standardized Geographic Information Systems (GIS) methodology should be adopted statewide for water and land use planning. This process will help ensure an adequate supply of water for existing and future demand. It will also protect important cultural, religious, and noneconomic values that make New Mexico the unique place that it is, and will prevent unacceptable levels of degradation of the land and water resources that must be available for future generations.

The need to finance annually and adequately the Interstate Stream Commission's regional water planning process was cited as the more pressing need, primarily because the quantity of underground water, and in some cases quality, is not precisely known or understood. A serious concern exists that ground water sources are rapidly being depleted in some areas such as the Ogallala aquifer in eastern New Mexico.

Most land use planning activities occur at the local level, although they are influenced to some extent by state and federal requirements, such as the Endangered Species Act and wetlands protection laws. Local and tribal land and water use planning entities should consult and integrate as a regional economic development system based on the watershed and/or groundwater basin.

The participants strongly feel that public education, public input, and public involvement are important and necessary in any comprehensive planning process. In such a process, New Mexico's traditions and values would be considered. Adequately funded education and information dissemination should inform the public regarding New Mexico's water resource issues to help motivate

support for planning and adoption of solutions to problems. The participants agree that more public awareness of laws and issues is needed in order to maximize the public's effectiveness in contributing to the planning process.

The Town Hall suggests that new models are needed. We also need to use more effectively the existing systems we have, emphasizing 1) more and better public and local input, 2) cooperation, 3) involvement of all stakeholders, and 4) early dialogue among government agencies and stakeholders, which results in better decisions.

The Town Hall overwhelmingly recommends additional funding for the State Engineer Office for reasons enumerated in this report.

The Town Hall strongly recommends that the State Engineer be given sufficient money to implement a comprehensive water inventory, adjudication, and administrative system, including geographic information systems and a publicly accessible database.

The cost of planning and enforcement should be shared by taxpayers, by land owners, and by water users; however, the state government should make planning and enforcement a higher priority for state appropriations.

Water and Land Management: Historic Uses and Public Welfare

The governance and management of water and land is complicated. As cited in the background report, at least two dozen public entities have some role in the management, administration, planning, and regulation of water use, water rights, and land use.

The Town Hall recommends that, as an initial step, the roles of all the public entities be examined and their activities better coordinated and simplified. Collaborative decision-making among federal, state, regional, local, and tribal jurisdictions, elimination of duplication, increased public and local input, and overall accountability are essential for effective land and water management. These collaborative efforts should be encouraged in ways such as incentives and performance rewards.

The Town Hall participants suggest that water and land use management models in other states be examined to help determine what improvements in New Mexico's governance systems are needed. Colorado's effective system for water rights adjudication and active, real-time management of Rio Grande deliveries to New Mexico are examples of these models. Suggested areas of research should include prior appropriation states, the Delaware River Commission model, management models that are based on watersheds, streamlining of processes, and organizing around water basins, and/or political boundaries sharing common water resources.

The Town Hall cited the Lower Rio Grande Water Users Association, the Eastern Plains Council of Governments, the Middle Rio Grande Council of Governments, and other regional groups as examples of cooperative resource management. England and Australia utilize basin authorities to achieve water management goals—perhaps these are models for the Ogallala aquifer.

The toolbox for water and land management contains laws, regulations, incentives, penalties, rewards, trade-offs, tax breaks, and oversight. The Town Hall suggests that existing tools be utilized more deliberately; moreover, the participants expressed a preference for applying incentives, price breaks, and tax advantages for compliance and superior performance, rather than surcharges, penalties, and

fines for noncompliance. Innovative land use projects that encourage resource conservation and enhance quality of life should be encouraged. Uncontrolled allocation of three-acre feet per year for domestic wells in some areas creates water demands in conflict with other water rights holders and water resource management. The State Engineer must be given statutory authority to address this problem.

The Town Hall recommends that the state legislature change New Mexico water law regarding forfeiture of water to create an incentive for water conservation in all uses.

The Town Hall participants gave careful thought to the diversity of demands for water and land. The Town Hall is not willing to confer priority status to any one use. The Town Hall participants urge that historic and cultural uses such as farming and ranching, the use of acequias, all Native American uses, timber harvesting, mining, oil and gas production, military purposes, fish and wildlife habitat, and wilderness be given consideration in discussions and decisions about water and land use planning,

Public Welfare, Public Interest

"Public welfare" (frequently used interchangeably with "public interest") is an important and valuable criterion applied by the State Engineer Office and the courts when considering proposed uses of water. The Town Hall recommends that public welfare be defined broadly and be determined based on the local, community, and regional level input consistent with the Interstate Stream Commission's Regional Water Planning Handbook and in harmony with a state water plan.

In compliance with the state's Prior Appropriation Doctrine, historic uses of water are to be given equal consideration. However, New Mexico must have comprehensive administration of water at the state level to assure that local efforts are consistent with statewide efforts, including regional planning and compliance with Interstate Stream Compacts.

While some need for flexibility should be included in the definition of public welfare, the Town Hall also recognizes the need for stability and security. The Town Hall urges that the public welfare criteria include, but not be limited to, water quality, cultural values, impact on land use plans, environmental impact, economic impact, social impact, scenic beauty, health and safety, fish and wildlife habitat, recreation, area of origin and destination impacts, sustainability, and regional water planning.

Conservation, Technology, and Policy Considerations

The Town Hall recommends that one of the cornerstones of New Mexico water policy, known informally as "use it or lose it," should be examined and, in the case of conservation, modified in order to achieve more efficient use without undermining the law of prior appropriation. The historic policy, which requires water rights owners to use the water or lose those rights, should not be an inducement to waste water and a disincentive to conservation.

Policies that reduce waste and encourage conservation should be encouraged and enforced, if necessary, especially for large water users. The Town Hall also recommends the establishment of a public education and communication campaign aimed at the conservation of all uses of water, such as the program that has demonstrated success in Albuquerque. The Town Hall supports public policies that preserve and maintain the acequia systems and traditional agricultural communities as an important component of New Mexico's quality of life.

New Mexico has a wealth of technology located within its borders. The Town Hall offered several recommendations for coordinating efforts and maximizing the results. In addition to recommendations set forth above in this report, the Town Hall further specifically recommends as follows:

- Formation of a public/private/tribal partnership to develop a vision for future use of water and land resources and to utilize resources at New Mexico's national laboratories, research universities, and private industries
- Legislative action to establish water use, water conservation, and land use standards
- Development of a statewide, intrabasin water market, and expansion of water "banking" activities that includes pueblo/tribal waters when appropriate or beneficial
- Establishment of a statewide land classification and inventory project
- Protection of watersheds to safeguard water quality and quantity
- Establishment of economic incentives and encouragement to form agricultural associations for efficient water use technologies in small agriculture
- Modernization of the State Engineer Office, including a computerized data base with public access including Internet access; increased level of funding and staffing for the State Engineer Office
- Utilization of the expertise of New Mexico research universities to provide educational material to the public on a broad spectrum of land and water resource issues including agriculture, range land, water conservation, mining, energy/minerals, solar and geothermal energy systems, legal and economic issues and residential development
- Coordination of state and federal land agencies with local governments
- Development of economic policy that recognizes economic value for conservation
- Use of tax incentives to encourage the development of water-conservation technology
- New Mexico Environment Department should evaluate and disseminate information on site septic technologies, alternative technologies, and their appropriate implementation
    - More and better data about water quality and quantity and the status and attributes of land resources
    - State-of-the-art verified and validated modeling and simulation technology
    - Standardize and mandate compatible geographic information systems (GIS), including public access through the Internet, coordinated by the state Information Systems Council for land use and water planning
    - Water separation and recovery techniques for conservation and recycling, beginning with pilot projects
    - Development or acquisition of technology to utilize common brackish water
    - Encouragement of infrastructure to utilize gray water and to utilize lower-quality water for suitable industrial and commercial purposes
    - Discouragement of residential and commercial construction in flood plains where practical

- Creation of incentives for "infill" development in areas that have already been settled
- Desalinization, cleansing, or recycling of bad water
- Implementation of more efficient irrigation technologies, such as drip irrigation, low-energy precision application, and the use of technologies to minimize evaporation
- Revision of building codes to encourage water-saving and water-harvesting designs, such as water-collecting gutters, storm sewers, and landscaping
- Eradication of invasive, nonnative riparian species and replacement with native vegetation
- Creation of a study by the state on instream flow as a beneficial use

Recommendations for Action

In this report the Town Hall makes specific recommendations for action by New Mexico's public and private leadership.

The strongest of those recommendations is that a comprehensive, statewide, regional water planning effort must be accelerated and adequately funded and coordinated with land use planning to develop a strategic plan for the state of New Mexico. Data collection, public education and involvement, input and collaboration among all key stakeholders are absolutely essential in this effort.

In order to begin to address this program and others, Town Hall recommends that a dedicated fund be created within the State Engineer Office and enabling legislation be enacted to carry out these objectives.

The Town Hall recommends that the dedicated fund would support the data collection, planning, education, outreach, adjudication, administration, enforcement, licensing, and conservation functions of the State Engineer Office. This fund, and particularly the full adjudication of water rights, will promote certainty in the use and transfer of New Mexico water, thereby promoting orderly economic development.

The Town Hall further recommends that the funding for the program be partially derived from user fees on water delivered to rural, municipal, and industrial water systems, except for low-income and agricultural users.

The Town Hall also recommends a substantial increase in all processing fees presently charged by the State Engineer, and institution of a subdivision review fee, so that all fees charged are sufficient to cover the cost of the services that are provided.

The New Mexico Legislature should pass legislation requiring integrated water and land resource planning and program action within the regions of the state.

Communities must organize to begin developing goals and objectives for themselves with regard to water and land use. Communities should focus on their values, quality of life, economics, and resources.

Conclusion

Land and water problems affect New Mexico unevenly. Some areas are already in crisis; other areas may be in crisis soon if the kind of actions recommended in this report are not taken. New Mexico is experiencing a population growth of historic proportions that is exerting great pressure on land resources. While this report has focused largely on water, the Town Hall participants recognize a great need for regional planning focused on decision making at the local level. These plans must be developed with the basic premise that people's water needs for survival are recognized within the context of New Mexico's unique and rich culture.

A follow-up town hall addressing growth management (integrating planning for land use, housing, economic development, water, air, and transportation) is strongly recommended.