

Community Water Systems

Apart from the major cities along the Rio Grande corridor, much of New Mexico remains relatively rural. Recent studies estimate a 2013 population of around 2,085,500 statewide. In the state fiscal year 2011, about 1,836,000 people, or 88 percent of New Mexico's population obtain their water from community water systems. Approximately 284,000 people, or about 14 percent of the population, receive their drinking water from community water systems serving fewer than 5,000 people. As of 2012, there are 1,148 public water systems that provide drinking water in New Mexico. Of these systems, 593 are community water systems; of these, 546 serve fewer than 5,000 people; of these, 410 serve fewer than 500 people; and, of these, 160 community water systems serve fewer than 100 people. Even in the more densely populated areas of the state, there are small systems located adjacent to the larger municipal systems.

In 2005, the Office of the State Engineer (OSE) contracted with the Utton Center and the Institute of Public Law of the UNM School of Law to review the statutes under which water and wastewater systems are organized and to summarize the statutory framework. A project management team comprised of representatives of the OSE, the N.M. Environment Department (NMED), and the N.M. Rural Water Association guided the effort. The purpose of this project was to develop information to enable researchers and policymakers to understand the statutory framework and take any next steps needed to improve it. The report is entitled *Water and Wastewater Systems in New Mexico: A Statutory Review and Comparison* and may be obtained through the Utton Center website listed below. This report has not been updated since 2005.

Challenges Facing Small Water Systems

The large number of small community water systems in New Mexico creates a challenge in providing safe, reliable drinking water to our citizens. Regardless of its size, the operators and directors of water systems are responsible for complying with all applicable regulations that ensure safe drinking water. To operate effectively, water systems must have sufficient financial, managerial, legal, and technical capacity. The smaller systems,

“ Many western rural areas have never had adequate water supplies and have a need for a reliable water supply to attract and maintain rural economic and public health.”

Jim Dunlap,
before the Committee on
Energy and Natural Resources,
U.S. Senate (May 11, 2005)

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however, lack the resources of many larger systems and often cannot develop and/or sustain the necessary capacity.

Financial Capacity: Establishing sufficient financial capacity can be challenging for small community water systems. Financial resources must cover the cost of staff, insurance, legal services, professional bookkeeping, certified operators, expansion, scheduled or emergency repairs, and technology upgrades. The systems often do not have rate structures or the economies of scale that allow them to collect sufficient revenue to meet these needs. They tend not to have adequate reserves to address emergencies. Systems that must accommodate population growth need to find the resources to acquire new water rights and to expand their infrastructure. Systems that are vulnerable to drought because they rely on surface water or shallow groundwater may experience a financial short fall when faced with developing alternative water supplies. Although grants and loans are available, barriers to these resources include: inadequate bookkeeping resources to meet auditing requirements; lack of planning documents such as the Preliminary Engineering Report (PER) or Environmental Information Document (EID); organizational structures that preclude eligibility for some grants; and/or, a reluctance to take on debt.

Managerial and Technical Capacity: Community water systems need operators, management staff, bookkeepers, and directors. However, some small systems cannot afford certified operators or professional managers, relying instead on volunteer directors and/or volunteer operators. Even when operators are paid employees, it may be difficult to keep

positions filled in some parts of the state because of location or competitive compensation from larger municipalities. Operators must be certified and participate in ongoing training to assure that the systems function properly and regulations, past and present, are understood and followed. Managers, board members, bookkeepers, and/ or directors must have sufficient training to ensure that billing and financial management processes are sufficient to meet auditing requirements.

Legal Assistance: Community water systems need legal assistance to meet the issues encountered in the ordinary course of business and for the acquisition of water rights. Even when systems have sufficient established water rights, they need to be able to ensure compliance with existing water rights permits and to protest new applications for appropriations or transfers of water rights, which they believe might negatively impact their sources and supplies.

Regulatory Compliance: Community water systems that accommodate at least fifteen service connections or regularly serve 25 people daily at least 60 days out of the year are regulated under the Safe Drinking Water Act and the state drinking water regulations. These systems are responsible for collecting all microbiological and chemical samples from their distribution systems, although the NMED Drinking Water Bureau will assist in some instances. The Bureau performs all other sampling and pays for the analysis of compliance samples. The N.M. Water Conservation Fund provides funding to the Bureau to sample for some contaminants. NMSA 1978, § 74-1-13. Water systems must also comply with the New Mexico Drinking Water Rules (N.M. Code R. § 20.7.10), and Mutual Domestic Water Consumers Associations (MDWCAs) must comply with the Sanitary Projects Act. NMSA 1978, §§ 3-29-1 through 3-29-21.

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Organizational Structure of Water Systems

The organization of a community water system may be developed using any one of a number of different structures. The study “Water and Wastewater Systems in New Mexico” lists 24 types of organizational structures. As a result, the ways in which systems operate and obtain funding also vary considerably. Some of the primary organizational structures include:

Mutual Domestic Water Consumer Associations (MDWCAs): Mutual Domestic Water Consumer Associations are authorized under the Sanitary Projects Act. The purpose of the Act is to “improve the public health of rural communities in New Mexico by providing for the establishment and maintenance of a political subdivision of the state that is empowered by the state to receive public funds for acquisition, construction and improvement of water supply, reuse, storm drainage and wastewater facilities in communities, and to operate and maintain such facilities for the public good.” Today, there are approximately 200 MDWCAs. A MDWCA is a public entity formed to provide domestic water supply facilities, sewage works, or both. Articles of incorporation must be filed with the Public Regulation Commission (PRC). A board of directors elected by the members oversees a MDWCA. The board members must receive twelve hours of training on ten topics within their first two years of service. An association’s rates are set by the board and must be sufficient to provide for operation and maintenance of the facilities. NMSA 1978, §§ 3-29-1 through 3-29-21.

MDWCAs cannot issue revenue bonds or tax the members, but they can apply for funding from the USDA Rural Development program, the Drinking Water State Revolving Fund, the U.S. Department of Housing and Urban Community Development Block Grant program (for planning only), the Rural Infrastructure Program, the Public Project Revolving Fund, and the Water Trust Fund.

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Water Cooperatives: If formed under the Cooperative Association Act, water and/or wastewater co-ops operate as private, membership-based organizations, governed by boards of directors elected by the members according to the bylaws. These co-ops are not public utilities subject to PRC regulation because they do not provide service to the public but rather to their members. They may own and hold membership in and share capital of other associations and corporations, issue bonds, or other obligations, and may borrow money, contract debts, and make contracts. The net savings must be apportioned once a year. There are no statutory provisions regarding rate making. As private entities, water cooperatives are not eligible for Water Trust Board Funding. Under the Sanitary Projects Act, water cooperatives may reorganize as MDWCAs, and thus be eligible for public funding, if they comply with applicable voting and filing requirements. NMSA 1978, §§ 53-4-1 through 53-4-45.

Municipal and County Utilities: Municipal and county utilities are overseen by the local governing body or a board appointed by the local governing body. They can issue bonds to finance water system improvements and are also eligible for all federal and state funding available to water systems including Water Trust Board funding.

Water and Sanitation Districts: Under the Water and Sanitation Act, water and sanitation districts are established by district courts and operate as public utilities and governmental subdivisions under the state or a county. They provide water and sanitation services as well as other services such as the construction of streets and parks. Each district is overseen by a board of directors who serve without compensation and are

elected by taxpayer-electors within the district. There is, however, no oversight body, other than the district court, for the administration of a district. A district can issue revenue bonds, levy taxes, and receive Water Trust Board funding. The board establishes service rates sufficient to cover the reasonable costs of doing business and to create sufficient revenue to cover the bonds issued. NMSA 1978, §§ 73-21-1 through 73-21-55.

Private Utilities (Investor Owned Utilities): Private utilities are regulated by the PRC. While there are some larger private utilities operating in the State, there are also numerous small private water systems serving small or rural developments and mobile home parks. Private utilities are not eligible for Water Trust Board or other state funding.

In addition to these types of organizations, various municipal and county improvement districts, public improvement districts, private non-profit organizations, and other associations may also provide water services in New Mexico. A number of different laws, passed at different times, offer different and sometimes inconsistent guidance to counties interested in owning and operating their own water supply and wastewater collection systems.

Review of Statutes Guiding Water Systems

The report, *Water and Wastewater Systems in New Mexico*, identified and evaluated statutes under which the different types of systems are organized and managed, as well as statutes relating to system financing, regulatory oversight, and water planning. Some of the key issues and gaps identified in the statutory assessment were:

Definition of the Service Area: Only a few of the statutes give the entity operating the water or wastewater system an exclusive service area or the tools to prevent encroachment, overlap, or duplication of services.

Source Water Protection: Some statutes do not give water systems the means to protect their water supply sources from contamination. While state and local laws provide limited protection, water systems themselves may not have the tools needed. Public water supplies have at times been affected and in some instances have been temporarily placed out of commission due to leaking underground storage tanks or other contaminant sources. Communities that have been affected include Alto, Hobbs, Los Alamos, Milan, Peñasco, Pojoaque, Santa Fe, and other locations around the state. For communities that do not have back up supplies, vulnerability to contamination can be a very serious issue.

Water Conservation Measures: Few statutes require that systems employ water conservation measures. This is a serious shortfall in view of the overall limited water resources in New Mexico. Moreover, integrating water conservation into all levels of water service is a key strategy for the State as reflected in the State Water Plan.

Governing Structure: Only a few statutes provide guidance to boards of directors to ensure skilled direction and management over time. The statutes don't consistently require the retention of board members and professional staff to ensure that the organization has the capacity and expertise to operate the system and manage the business. Small systems with volunteer directors may be unable to respond to the long-term challenges of system operation. There is also little guidance for an entity interested in changing its structure through reorganization, merger or joining with another structure for management of a shared resource. Finally, it is not always clear whether an organization is a private or a public entity. The status is important because it affects the rules that apply and the

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funding that is available. A number of water and wastewater systems are operated by homeowner and property owner associations in subdivisions and developments, and there are no statutes that clearly guide the organization of these systems.

Financial Management: Water systems run into trouble when they do not plan sufficiently for replacement and repair of infrastructure or for emergencies; yet few statutes require that they engage in this type of financial planning or in maintaining reserve funds. Sometimes rates and charges are required only while bonds are outstanding or systems are applying for funding, and little attention is given to the use of rates to maintain long-term viability or to promote the conservation of the water supply. When small systems do not have adequate emergency capital for replacement parts, they are vulnerable to temporary or long-term disruptions in service.

System and Area-wide Planning: Community water systems should plan for the technical and managerial aspects of water service emergencies and long-term disruption of supply. There are few statutory requirements that an entity owning or operating a system engage in long-term capacity planning, drought management, or participate in regional water planning. Some small systems are unprepared for these eventualities, having no backup water sources or strategies for supplying water when there is a disruption in supply such as a lowered water table. The lack of planning and financial capacity to deal with emergencies can lead to severe consequences such as diminished or no service; for example, New Mexico communities including Hagerman, Cloudcroft, Los Brazos, Cañon, Otis, Carlsbad, Regina, and Eunice have faced acquiring emergency supplies following drought periods.

Some statutory organizational structures make the formation of a water supply or wastewater collection system very complex while others seem to make it too easy; and none of the existing structures offer a clear

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and comprehensive set of provisions to meet today's challenges. The 2005 review of the statutes indicated a clear need for improving the organization, management, and oversight of water systems in New Mexico. In 2006, the Sanitary Projects Act, which regulates MDWCA's, was amended to provide clearer guidelines, however several of the issues stated above remain unresolved.

Assistance for Community Water Systems

Several organizations, both in and out of state government, have assistance programs for community water systems. These organizations provide managerial, operational and financial training, funding, technical assistance, and oversight for operators, managers, and board members.

New Mexico Rural Water Association (NMRWA): This non-profit professional organization provides technical assistance and training to member water and wastewater utility operations throughout New Mexico. The NMRWA has over 485 system members collectively serving water to over 1,296,500 customers throughout New Mexico. Membership is open to New Mexico water and wastewater utilities serving less than 50,000 people, and to firms and individuals that adhere to the purposes of the Association. Today's membership includes mutual domestic water associations, municipal government water utilities, community water cooperatives, public water and wastewater sanitation districts, non-profit water utility organizations, and over 100 industry firms. NMRWA serves any water system in New Mexico regardless of membership. It is governed by a twenty-four-person board of directors, elected from systems throughout the state. The

NMRWA provides statewide, on-site assistance, training, and troubleshooting support to water and wastewater system operators, board members, and managers.

Association is funded by membership fees and funding partners, such as the U.S.D.A. Rural Development program, and the EPA.

The primary focus of NMRWA programs is to develop the capacity of small public water and wastewater systems so that they may provide quality, consistent services to rural families. Through its circuit riders, NMRWA provides statewide, on-site assistance, training, and troubleshooting support to water and wastewater system operators, board members, and managers. It opened an Albuquerque training facility in 2011. In FY 2012, NMRWA made 1,875 onsite contacts and trained 972 operators. In 2011, the organization moved to a fee-based training program, which gives members a discount. This move was necessitated by funding cuts by EPA and has resulted in operators taking the training more seriously. Other services include: assistance with leak detection, emergency technical issues, wellhead and source water protection planning, establishing rate structures, operating disinfection systems, wastewater technical issues, tribal system issues, operator accreditation, training for board members, contamination prevention, regulatory assistance, learning sustainable development practices, and training on how to form a mutual domestic water consumers association.

Rural Community Assistance Corporation (RCAC): is a non-profit organization with 35 years of experience providing a wide range of community development services to rural communities in fifteen western states, including New Mexico. Its program areas include environmental infrastructure (water, wastewater and solid waste), affordable housing, economic development, leadership development, and community development finance. RCAC is a certified Community Development Financial Institution (CDFI)

and finances water, wastewater, and solid waste systems as well as affordable housing and community facilities.

RCAC focuses on regional collaborations and provides technical assistance, training, and financing. It assists water systems and communities with board, management, and operator training, strategic planning, and the preparation of five-year financial plans, rate studies, funding packaging, affordability analysis, funding applications, and compliance with funders' administration requirements. It helps cooperatives and homeowners associations to convert to Mutual Domestic Water Associations. Throughout the west in FY 2012, RCAC's technical assistance providers worked with 522 communities, delivered 290 workshops, drafted 48 work plans, developed five community strategic plans, and trained 80 individuals in green infrastructure.

Southwest Environmental Finance Center (SWEFC): The Southwest Environmental Finance Center provides training and other assistance for water systems in asset management and capacity building including, source water protection, tribal water system compliance, tribal operator certification, water regionalization, drought preparedness planning, arsenic rule compliance, and leak detection.

NMED Drinking Water Bureau (DWB): The NMED Drinking Water Bureau provides training and assistance to community water systems. The DWB periodically provides Operator Certification Training as well as training on specific regulations or topics relevant to system operation at locations around the state. It is the state's largest provider of board training. It also provides training and assistance to operators regarding technical, managerial, and financial capacity matters and conducts vulnerability assessments of water sources. The Water Conservation Fee helps to pay the cost of providing these services. The Water Conservation Fund is funded through a water conservation fee of three cents per 1,000 gallons of water produced by every public water system.

NMED Construction Programs Bureau (CPB):

The NMED Construction Programs Bureau’s mission is to assist communities in developing sustainable and secure water, wastewater, and solid waste infrastructure. The CPB offers a web portal (see below) to assist communities in finding water, wastewater, solid waste, and tribal infrastructure assistance, support, and funding streams. The CPB provides engineering and project planning and preparation; provides project oversight; assists with compliance with regulations and audit reports; and conducts sustainability reviews of management, financial, and capital improvement plans.

Financing for Small Water Systems

One of the challenges facing small rural water systems is acquiring financing for system planning, design, construction of improvements, periodic upgrades, and in some instances, expansion. In addition to financing for routine system operations, which is normally covered through the rate structure, water systems need funds to deal with emergency equipment repair or replacement. In many small systems, the rate structure for 6,000 gallons is over \$50 a month. Even when it is available, many small systems do not qualify for funding because they already have maximized loan capacity and loan providers do not wish to assume the risk for additional loans. There is not an agency in the state that oversees and/or coordinates or decides what a community can afford, where they may obtain the funding, or even help put a funding package together.

The NMED Construction Programs Bureau provides oversight for several loan and grant programs. In calendar year 2012, the CPB managed and/or provided technical oversight for two hundred (200) projects from the following and other funds.

Special Appropriations Program (SAP): Special Appropriations are state grants for infrastructure projects. They are issued when authorized by the New Mexico legislature

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and approved by the Governor. Since 1973, the CPB has administered over \$200 million in special legislative appropriations.

Communities must apply for these funds through their legislative representative and the funds are distributed through state agencies. The agencies also oversee the expenditure of the funds. In the 2012 Legislative Sessions, the Bureau received 43 new Severance Tax Bond appropriations valued at \$6,578,016, and 12 reauthorizations. It disbursed over \$22 million for water, wastewater, and solid waste projects; performed administration and construction oversight for 73 projects; and closed 30 projects. This funding is helpful to communities; however, in many cases it is not sufficient to complete a project.

Communities can spend years trying to find other funding so they can complete fully functioning improvements.

Clean Water State Revolving Loan Fund (CWSRF): Through the Clean Water State Revolving Fund Program, NMED maintains a revolving loan fund to provide a source of low-cost financing for a wide range of wastewater or storm water drainage projects developed to protect surface and groundwater sources. Funds may also be used for projects that control nonpoint source water pollution, such as a solid waste and septic tank installations. The CPB executed two construction loan agreements under the CWSRF in December of 2012. These loans provided funds to: a) San Juan County for an \$86,000 loan at 3 percent interest and b) the City of Las Vegas for a \$356,000 loan at 0 percent interest. The CPB is currently providing oversight for eight construction project loans and grants.

The Drinking Water State Revolving Loan Fund provides low-interest loans to water systems to finance the cost of repair and replacement of drinking water infrastructure, ensure compliance with drinking water regulations, and protect drinking water quality and public health.

Rural Infrastructure Revolving Loan Program (RIP): The Rural Infrastructure Revolving Loan Program provides financial assistance to local authorities for the construction of or modification of water supply, wastewater, and solid waste facilities. The maximum loan per entity and project is \$2 million per fiscal year. Eligible entities include any incorporated city, town, village, MDWCA or water and sanitation district whose facilities serve a population of less than 20,000 persons or a county that serves a population of less than 200,000 persons. Eligible projects include infrastructure improvements, treatment plant improvements, water quality improvements, water rights acquisition, and costs for legal fees, easements, or engineering studies. In 2012, the interest rate for loans was reduced from 3 percent to 2.375 percent allowing more communities to accomplish essential infrastructure improvements. As of December 31, 2012, the Bureau has 12 active RIP loans in construction, totaling \$5,692,832. There are currently ninety-four loans in repayment with a loan balance of \$14,572,195. NMSA 1978, §§ 75-1-1 through 75-1-6.

New Mexico Water Trust Board (WTB): The Water Trust Board provides grant and loan funding to New Mexico's public entities in five project categories: 1) storage, conveyance, and delivery of water; 2) implementation of the Endangered Species Act collaborative programs; 3) restoration and management of watersheds; 4) flood prevention; and, 5) conservation, recycling, and treatment or reuse. Recently, the WTB approved new capacity criteria for funding water systems. N.M. Finance Authority (NMFA) staff, in conjunction with other

agencies and stakeholders, will be developing specific policy related to the new criteria in the coming months. Further details of Water Trust Board Funding are provided in a separate article within this publication.

Drinking Water Revolving State Loan Fund (DWSRLF): The Drinking Water State Revolving Loan Fund provides low-interest loans to water systems to finance the cost of repair and replacement of drinking water infrastructure, ensure compliance with drinking water regulations, and protect drinking water quality and public health. It is co-administered by the NMED Drinking Water Bureau and the NMFA. Community water systems and non-profit, non-community water systems may apply for this funding.

American Recovery and Reinvestment Fund (ARRA): The American Recovery and Reinvestment Act provided funds for the CWSRF program. Over \$23 million in ARRA subsidization has been provided to seventeen New Mexico communities. As of June 30, 2012, all the ARRA funds for New Mexico had been disbursed.

The N.M. Finance Authority administers loans from the Public Project Revolving Fund (PPRF) and the U.S.D.A. Rural Development program's Water and Wastewater Grant Fund. The PPRF offers small loans for public projects costing up to \$1 million per project and capital equipment purchases. The Water and Wastewater Grant Fund provides financial assistance for water and wastewater systems in communities with populations of up to 10,000 persons.

The NMFA also administers a grant program that helps systems complete planning documents including those PERs, EIDs, Asset Management documents, Water Plans, and others. Although this is a grant program, communities qualify based on the Median Household Income (MHI). For some small systems where the MHI is high for the general area the grant can be as low as 25 percent thus the communities cannot afford the loan, and the planning is not completed.

Regionalization

In recent years there has been interest in determining where improvements to small water system operations can be achieved through regional cooperative alliances or mergers. The various levels of regional cooperation range from simple measures such as sharing of equipment in emergency situations, to full physical inter-connection of infrastructure. Examples of regionalization projects in New Mexico include the Eastern New Mexico Rural Water System (or Eastern New Mexico Water Utility Authority); the Mariposa Alliance, the San Juan County Rural Water Association, and the San Juan Water Commission in San Juan County; the Rio Embudo MDWCA, the Santa Cruz River Valley Coalition, the El Rito Regional, and Santa Cruz Regional MDWCA in Rio Arriba County; the Greater Glorieta Community MDWCA in Santa Fe County; the Valdez MDWCA, Lower des Montes MDWCA and Union del Llano MDWCA in Taos County; the Lower Rio Grande Public Water Works Authority in southern Doña Ana County; the Sangre de Cristo Regional in Guadalupe County; and the Albuquerque Bernalillo County Water Users Authority in Bernalillo County. The backbone of the *Aamodt* water rights settlement agreement is the construction of a regional water system for the Pueblos of Nambe, Pojoaque, San Ildefonso, and Tesuque and for non-Indian people in the Pojoaque Valley Basin through participation of the County of Santa Fe.

Regionalization has helped systems improve at all levels. Some immediate results include the ability to afford loans and to build reserves. Some small systems have built sufficient reserves in half a year. Small systems also benefit through reducing the number of board member volunteers, in an age when people are less willing to volunteer; in one case, the board membership reduced from thirty-five to seven individuals. The customers of regional systems have also experienced improved water service, customer service and responsiveness to issues.

One important cooperative program is known as the Water/Wastewater Agency Response Network (WARN). This utility network is private and voluntary. It is based upon an agreement between systems to help each other in emergencies, whether man-made or natural. This agreement sets out rules that govern emergency assistance. Membership is open to all drinking water and wastewater utilities in New Mexico, and joining or executing the agreement is free. More information can be found on the NMRWA website.

Programs to improve efficiencies through regional cooperation or merger will be important to the future of drinking water systems in New Mexico. Many see regional solutions as a boon to community water systems with problems such as run-down infrastructure, poor source water quality or availability, insufficient staffing, or budgetary issues.

Today, several organizations support regionalization as one solution to small water systems problems. NMED, RCAC, and the others are taking a leadership role in several projects. Key funding sources also promote regionalization by giving a preference to regional projects. However, regionalization can be difficult and time consuming, requires cooperation between several entities, and may result in the loss of local autonomy for systems. These issues can fuel reluctance on the part of community water systems' long-term board members and leaders to participate in a regionalization project.

There has been a call for more coordinated support from the state legislative and executive branches. Systems that run well at a reasonable cost may not need to

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consolidate with others to keep providing reliable, good quality water to their consumers. In many cases, however, these systems join in a regionalization effort because they are planning for long-term sustainability and recognize the decreasing interest in volunteering for a board or committee positions. The EPA recommends that systems that are having problems, or are concerned about problems in the future, evaluate all their options including regionalization.

Recent Developments

Despite statewide support of community water systems, many New Mexico citizens remain in need of reliable access to potable water. During the drought of June of 2013, the village of Magdalena declared an emergency when only 13 feet of water remained in the town well to serve its 1,000 residents. Local businesses, including the health clinic, were forced to shut down. Without a backup source of stored drinking water, the village resorted to importing 46,000 gallons from nearby communities. As of June of 2013, village officials plan to build a backup well. They will first need a permit to operate the well. Engineers must also determine a means of incorporating a deeper well into the village's existing infrastructure.

Magdalena is just one of the 250 rural communities in New Mexico with a community water system dependent on a single source of water. In response to the Magdalena emergency, some of these communities now seek to implement measures to avoid running out of water during times of drought. The eastern New

Mexico village of Wagon Mound recently teamed up with the New Mexico Drinking Water Bureau to develop a water conservation plan. Wagon Mound's only drinking water source is a single natural spring. In October 2013 it was reported that the spring's water level had dropped more than a foot and a half in a month. By working directly with the Drinking Water Bureau, Wagon Mound hopes not only to protect its remaining groundwater, but also to establish a secondary source of water in the event that their spring runs dry.

Interstate water disputes can also threaten the viability of rural community water systems. The town of Jal obtains its drinking water from a 50-mile long aquifer that runs along the Texas border. The city of Midland, Texas purchased land over the aquifer in 1961 on the Texas side of the state line. According to Texas law, as owner of this land Midland is entitled to use the aquifer to benefit its citizens without regard to the hydrological effects on anyone else, including Jal's populace. In 2012, Midland announced a proposed T-Bar Ranch pipeline that would transport water from the shared aquifer to the Midland area. As of May of 2013, Jal has requested that Midland respect the needs of their community. The New Mexico oil town was counting on this water supply to last forty years, and Midland's proposed uses jeopardize that plan.

Conclusion

There are resources available to help community water systems develop the financial, managerial, and technical capability needed to provide reliable, safe drinking water to New Mexico citizens. There are, however, gaps in the funding, legal framework, and available qualified staff. These gaps affect the ability of community water systems to run smoothly and in compliance with rules and regulations. Continued or improved funding and resources for system capacity development, technical and managerial assistance, and enforcement of water system violations are critical. Statutes can be strengthened to

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increase accountability and consistency among organizational structures. Public education is necessary to help consumers understand the need for sufficient water rates to support adequate system operations. Broad and coordinated support among the branches of state government and other players is necessary to maximize efficient

effective development, oversight, and support of community water systems.

By Joanne Hilton, Hydrologist and Susan Kelly, J.D. (2009)

Latest Update by Sarah Armstrong, University of New Mexico School of Law, Class of 2015 (2013)

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