



STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
SANTA FE

John R. D'Antonio, Jr., P.E.
State Engineer

BATAAN MEMORIAL BUILDING, ROOM 101
POST OFFICE BOX 25102
SANTA FE, NEW MEXICO 87504-5102
(505) 827-6175
FAX: (505) 827-3806

MEMORANDUM

DATE: August 1, 2008
FROM: John D'Antonio, State Engineer, Chair, Governor's Drought Task Force
TO: Governor Bill Richardson

RE: **RECOMMENDATIONS FROM THE DTF**

On behalf of the Governor's Drought Task Force (DTF), I would like to thank you for issuing Executive Order 2008-037 (EO) on July 14th. Pursuant to item 4 in the EO, the Drought Task Force (DTF) met immediately on July 18th to consider any revisions to the New Mexico Drought Plan and to prepare recommendations concerning steps that the State may take to conserve water during this period of extreme drought.

Current Status

The State of New Mexico still suffers extreme quantity water-related conditions; parts of the state are suffering from extreme drought. The DTF is looking carefully into how New Mexico can better manage and prepare for such extreme climate conditions and is pleased to provide the following recommendations.

Recommended Actions:

1. Critical Actions -

Continue to work with the United States Department of Agriculture Farm Service Agency and the New Mexico Department of Agriculture to follow through with the drought declaration process in order to facilitate the release of federal assistance to farmers and ranchers in our state.

2. Ongoing Measures –

The Task Force has been and is continuing to work cooperatively to ensure that areas affected by drought have the necessary assistance. This effort has been ongoing over the past four years, but began to take focus as a result of your implementation of the 2005 House Joint Memorial 86. That effort instructed the Office of the State Engineer and the New Mexico Environment Department (NMED) to work with other agencies to develop criteria for water system planning, performance and conservation as a condition of state financing. This effort has culminated in Executive Order 2007-50 which, amongst other direction, established the Water Cabinet and the Water and Wastewater Infrastructure Development Division at NMED. These efforts have led to the development of water and wastewater infrastructure evaluation plan, a uniform application implementation plan, and recommendations for efficient and effective use of water and wastewater funds. EO 2007-50 also requested the collaborations of the Department of Finance and Administration and the New Mexico Finance Authority. The coordination between these agencies provides drinking water suppliers in need with one-stop-shop opportunities to obtain capital funding. These efforts are ongoing and will continue.

Below are the highlights of recommendations from each of the Drought Task Force member agencies. The full recommendations of each agency are also attached for your perusal.

OFFICE OF THE STATE ENGINEER

- Support ongoing water development planning efforts mandated by HM 42 from the 2007 Legislative Session
- Provide technical assistance (leak detection & audit training programs) to encourage use of the best available conservation technologies. To date the OSE has worked with Ruidoso, Rio Rancho, Gallup and Las Vegas to identify over 600 million gallons/year of water leaking from those systems.
- Continue to promote best practices in local communities to achieve benchmarks and conservation goals
- Continue to develop new partnerships with public and private entities throughout the state to promote water conservation

- Continue to expand water conservation education and outreach programs in our schools and with the general public
- Lead efforts to create guidelines for more efficient use of water (gpcd methodology)

INTERSTATE STREAM COMMISSION

- Maintain the effort to keep the Elephant Butte Pilot Channel open
- Continue the operation of the Water Management Decision Support System for Middle Rio Grande Conservancy District
- Support the following:
 - San Juan River Administration Agreements
 - Regional Water Planning
 - Acequia Rehabilitation Programs
 - Metering Re-loan Program
 - Middle Rio Grande ESA River Operations Optimization

NEW MEXICO DEPARTMENT OF AGRICULTURE

Continue coordination effort to ensure appropriate information is transmitted to US Department of Agriculture. Other activities include developing systems to assist producers in anticipating drought conditions and planning appropriate plantings, operations and other activities.

TOURISM DEPARTMENT

- The Tourism Department will strive to make all visitors and local residents aware of New Mexico's many recreational opportunities and any potential restrictions to those opportunities; educate the media on the negative consequences "sensational" news reporting can have on the tourism industry; and continue its partnership with State Parks and the State Engineer's Office on an annual press conference each spring to update residents and tourists on possible impacts to the summer tourism season.

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

- NMEMNRD will continue the Governor's Green Power Purchase initiatives, electrical production from installed wind turbines and other similar programs. These renewable energy and efficiency projects are saving 3,400 acre-ft per year.
- Diversify programming. To counter the negative impacts the drought has on State Parks Division revenue - which have been significant - SPD has been expanding and diversifying recreational opportunities, programming, events, etc. that might appeal to visitors in spite of drought conditions. All landscaping, new building and retrofitting projects use best water conservation technology.

- Pre-positioned resources. The Forestry Division prepositions fire suppression resources in areas of the state to provide for fast response times to wildland fires. The pre-positioning helps keep new fires small and less costly when compared to large catastrophic fires that threaten or burn into communities.
- Community wildfire protection planning. The Forestry Division is working with many communities at risk from wildfire to develop Community Wildfire Protection Plans.

NEW MEXICO FINANCE AUTHORITY

- The New Mexico Finance Authority (NMFA) has provided effective financial and administrative support to combat the on-going drought in New Mexico. NMFA has several programs which can be applied to assist in the drought relief efforts

DEPARTMENT OF FINANCE AND ADMINISTRATION

- DFA is exploring the potential of requiring all entities that are seeking capital funds for the construction or improvement of wastewater treatment plants to evaluate the potential of dedicating produced wastewater to reuse on golf courses or other appropriate areas.

NEW MEXICO ENVIRONMENT DEPARTMENT

- The Environment Department has been working diligently on creating the Water and Wastewater Infrastructure Development Division.

3. Potential New Initiatives

In addition to these ongoing activities, we recommend further study of the following new potential activities for your consideration:

- Review the potential for creation of water conservation tax incentives
- Creation of a state sponsored “Living with Drought” web site
- Report water use savings that are monitored at a local level and share successes statewide
- Provide further suggestions for funding and implementing conservation programs that can provide measurable results

CURRENT and ONGOING STATE AGENCY DROUGHT MITIGATION ACTIVITIES

THE FOLLOWING INFORMATION HAS BEEN PROVIDED BY THE SECRETARY OR DIRECTOR OF THE DEPARTMENT OR AGENCY. THIS INCLUDES INFORMATION THAT UPDATES THE 2006 RECOMMENDATIONS.

NM OFFICE OF THE STATE ENGINEER

Technical Assistance for Public Water Supplier

- Leading efforts on House Memorial 42, a review of the 72.1.9 NMSA on water development planning to hold water rights unused.
- Publication of *New Mexico Water Use by Categories 2005*
- Pilot tested draft methodology and spreadsheet for standardizing the calculations of gallons per capita per day in Santa Fe, Santa Fe County, Gallup, El Vadito and Albuquerque.
- Distributing draft modules for conducting water use accounting as recommended by the American Water Works Association
- Conducting commercial audits for the food service industry through grant from the Bureau of Reclamation

Partnerships

- Worked with the NM Water Conservation Alliance and various sponsors to conduct “Save Every Drop: NM Landscape Training,” that included certification opportunities and continuing education credits for professional landscapers, irrigators and landscape architects.
- Became a state partner of the Environmental Protection Agency’s Water Sense program that develops specification for water efficient appliances, fixtures and irrigation equipment along with providing promotional materials.
- Produced *Irrigation Maintenance 101* DVD with the City of Santa Fe and Santa Fe Community College. DVD details operation of a commercial grade irrigation system.

Education and Outreach

- Provide kindergarten through high school curriculum on NM water issues and water conservation, distribution of over 85,000 pieces last year.
- Publication in November 2007 of *Discover the Waters of New Mexico*, developing in conjunction with Project WET, an award-winning international non-profit focused on water education. The publication provides a complete picture of New Mexico’s water to NM’s 8 to 12 year olds.
- Publication of *Roof-Reliant Landscaping: Rainwater Harvesting with Cistern Systems in New Mexico* is scheduled for August 2008
- Received grant from the Bureau of Reclamation to develop a DVD series on how to water New Mexico Landscapes, scheduled for completion summer 2009.

- Also coming in Summer 2009: statewide searchable plant list for xeriscapes and landscape irrigation calculator
- Lead efforts in planning implementation, sponsorships and/or presentations for various workshops, conferences, and festivals, including NM Rural Water Conference, Albuquerque Green Practices, Environmental Health and various County extensions and children's water festivals

INTERSTATE STREAM COMMISSION

Elephant Butte Pilot Channel – The dredging of the pilot channel through the sediment delta left behind at the upstream end of Elephant Butte Reservoir as the water level has receded in the recent drought years prevents the spreading and evaporation of the water on the delta. The pilot channel has been estimated to save between 10-20,000 acre-feet of water per year. This is roughly equivalent to one to two times the amount of water consumed by the City of Santa Fe annually.

Water Management Decision Support System for Middle Rio Grande Conservancy District – ISC staff working with MRGCD have developed an irrigation routing model that optimizes water use within the District. This type of work coupled with state and federally funded infrastructure improvements is credited with reducing diversions from a historical average of about 600,000 acre-feet/yr to about 325,000 acre-feet in 2004. Collaborative efforts between ISC and MRGCD continue to improve efficiencies.

San Juan River Administration Agreements - ISC staff has facilitated annual agreements for San Juan River administration and operations among the major agricultural, municipal and industrial water users on the river, which agreements include provisions for sharing of any water supply shortages between water users and habitat maintenance flows for endangered fish species. Such an agreement is in place for 2008.

Water Planning – The 16 regional water plans accepted by the ISC were required to include drought emergency contingency plans. In addition, the 2003 State Water Plan set “promoting drought planning” as a common goal and included implementation strategies related to drought planning, the Drought Task Force, and shortage sharing agreements.

Acequia Rehabilitation Programs – The ISC has several programs (in collaboration with the US Army Corps of Engineers and the Natural Resource Conservation Service) for rehabilitation and improvement of efficiency of acequia systems around the state. Many such rehabilitation projects include lining or piping of the acequias, which conserves significant quantities of water.

Re-loan Program – Under this program, irrigation, conservancy and soil and water conservation districts are able to borrow low interest money from the ISC's Irrigation Works Construction Fund to re-loan to their individual members for installation of irrigation efficiency measures that do not increase overall water consumption.

Metering Re-loan Program – Beginning in July 2006, additional re-loan funds were made available specifically for meters and metering equipment. These funds will be prioritized for use where the State Engineer has issued metering orders. The simple fact of installing meters and farmers being aware of their uses has been credited with changing use habits and conserving large quantities of water in the Pecos River Artesian Conservancy District.

San Juan Mountains Snowpack Augmentation - The ISC in 2007 entered into a five-year agreement with the Colorado Water Conservation Board to support winter cloud seeding activities in the San Juan Mountains in southwestern Colorado for the purpose of augmenting stream flows in the San Juan River stream system in Colorado and New Mexico. Pursuant to an amendment to the agreement, the ISC provided cost-share funding for seeding activities during the winter of 2007-2008.

Middle Rio Grande ESA River Operations Optimization – ISC staff have been reviewing river operations options that will help minimize conflicts among irrigators while still meeting the water needs of the endangered silvery minnow. This is being done in coordination with the appropriate federal agencies. In addition, the Commission has authorized expenditure of several hundred thousand dollars to support the optimization of river operations over the last several years.

NEW MEXICO DEPARTMENT OF AGRICULTURE

- Staff has been working with the United States Department of Agriculture Farm Service Agency to better communicate county damage reports/flash reports from FSA County Committees. These reports are integral to the drought declaration process and the release of federal assistance to farmers in our state. The department will coordinate with the Governor's office in sending a letter to the U.S. Secretary of Agriculture requesting drought declarations whenever the need arises.
- NMDA staff supports water conservation outreach initiatives be implemented through Cooperative Extension Service personnel.
- NMDA staff continues to participate with the Drought Monitoring Workgroup and provide agricultural indicators of drought conditions. Conditions such as soil moisture and range/pasture conditions are reported weekly by USDA National Agricultural Statistics Service (NASS). NMDA staff analysis this information and includes it in the New Mexico Drought Status Report throughout the growing season.
- NMDA staff has worked with scientist from the Climate Assessment for the Southwest (CLIMAS) as they expand AgClimate, the web-based decision support system, into New Mexico. This system provides risk assessment information based on historical temperature and precipitation associated with El Nino Southern Oscillation (ENSO) cycles. The system will also provide optimal growing schedules, chill accumulation risk assessments. Growing degree days, and also links with the pecan irrigation scheduling assistant. Many more features will become available to agricultural producers, as the

product is refined. In 2008 a workshop was held with county Extension personnel and local producers to inform them of the capability and to instruct them on the use of this system.

- NMDA staff performs bi-weekly reviews of the National Drought Mitigation Center's Vegetation Drought response Index (VegDRI). These maps are produced through calculation of integrated satellite observations of vegetation conditions, climate data, land cover, land use, soil characteristics, and ecological setting. They categorize drought conditions using ten-scale indicators ranging from extreme drought to extremely moist. This product was released in New Mexico in 2007 and the developers use stakeholder feedback as an indication for any needed adjustments.

TOURISM DEPARTMENT

NMTD has redesigned and brought the management of its web site, www.newmexico.org, in-house, in order to:

---Respond more quickly to questions regarding recreational opportunities, fire dangers, potential closings and upcoming events updated throughout the summer.

---Now offer a "live chat" with Department employees in New Mexico; and

---Provide links to sister state and federal agencies in New Mexico offering more in-depth information.

NMTD, State Parks, and the State Engineer's Office continue to work together to stage an annual press conference each spring in Albuquerque to forewarn residents and tourists about the impact the drought may have on the summer season and to plan accordingly. NMTD and State Parks also use the opportunity to encourage local residents to avail themselves of in-state recreational opportunities. NMTD continues to address concerns with media coverage on the negative impact "sensational" news reporting can have on the \$5 billion tourism industry. Undue fears cause real harm to businesses. In many cases the greatest threat is not the natural disaster, but the public opinion created by imprecise or sensational news coverage.

Staff at NMTD's nine visitor information centers and at the Department's main office in Santa Fe will make all visitors aware of New Mexico's recreational conditions, including restrictions, closures, etc. through conversation and handouts. The handouts will include instructions on controlling campfires in those areas where they are permitted.

With the help of its industry partners, NMTD has developed a consistent message regarding New Mexico visitation and recreation that addresses weather conditions, drought and other potentially negative factors that could impact the industry if ignored. NMTD's communications officer works with the industry and other state agencies to maintain this message.

NMTD encourages sister agencies to incorporate language in their press releases that is "reader friendly," and that the releases are in a language the average citizen will understand. Above all, note any activities or events impacted by the news in the release, as well as those a citizen might suspect could be impacted but are not. If activities or events are restricted or cancelled due to the

situation, conspicuously note the nearest safe alternative location or other unaffected events in the region.

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

Energy Conservation and Management Division (Contact: Fernando Martinez)

Governor's Green Power Purchase initiative of June 17, 2004. State agencies are making green power purchases of approximately 65 million kWh of electricity in FY09 (up from 8,239,697 in 2006), primarily from wind energy sources.. These purchases will save 48 million gallons, (up from 6 million gallons in 06), which is a savings of 147 acre-feet of water at the power plant. It is planned to increase green power purchases by state agencies to 130 million kWh in FY11, which is projected to save 96 million gallons (294 acre-feet) of power plant water consumption annually.

Electrical production of installed wind turbines. Estimated production is 1.439 billion kWh per year, up from 830 million kWhs per year in '06. Water savings are 1.064 billion gallons, which is a savings of 3,265 acre-ft. per year at the power plant, (up from 614.2 million gallons in '06).

Clean Energy Grants. Electrical savings for projects that have been completed are nearly 1 million kWh per year and 0.7 million gallons (2.2 acre-ft) per year at the power plant.

Total water savings. Total savings from ECMD-supported renewable energy and efficiency projects are approximately 1.11 billion gallons (up from 912.8 million gallons in '06), which is a savings of 3,400 acre-ft per year, enough water for 13,600 people in the arid southwest U.S.

Requiring all new fossil fuel or nuclear electric thermal power plants to be dry-cooled or at least employ hybrid cooling would save water. Power plants in NM consume (not just use) in excess of 55,000 AFY – roughly the consumptive use of ABQ. Don't place this additional cost burden on solar thermal electric power plants for the first 5-8 years while the technology matures and costs come down. Then have it apply to all. Retrofitting existing power plants with dry or hybrid cooling should not be ruled out.

A drought "PIK" program should be considered where farmers growing water consumptive but low value crops (e.g. alfalfa) are paid to not grow/irrigate).

State Parks Division (Contact: Dave Simon)

SPD has a Drought Response Action Plan (DRAP), developed in 2003, which we have in force and implement as appropriate. Some of the measures in the DRAP that we are implement include:

Rehabilitation and new construction. "Green" building approaches conserve energy, water and natural resources. Projects are underway at several parks to replace roof and HVAC systems with

more energy- and water-efficient technology. For example, all showers at State Parks are on timers to insure that there is no possibility of wasting water.

Public Education. With additional educational/interpretive materials on drought conditions and responses that all citizens can have to these conditions, we could do much more substantive drought education with our partnership with PED and the Parks No Child Left Inside program.

Xeriscaping. SPD hired a licensed landscape architect who has been preparing and implementing professional xeriscape and landscaping plans for state parks. This work continues with every project that we have in state parks.

Marina relocations. To preserve visitor services, SPD concessionaires are prepared to relocate several marinas to the deepest water available on state park lakes if significant drops occur.

Fire season assistance. SPD continues to offer state parks for pre-positioning fire fighting equipment if appropriate. In addition, Forestry and State Parks are preparing SPD staff for fire prevention education, fire response administrative assistance, and actual firefighting as circumstances arise.

Diversify programming. To counter the negative impacts the drought has on SPD revenue - which have been significant - SPD has been expanding and diversifying recreational opportunities, programming, events, etc. that might appeal to visitors in spite of drought conditions. For example, SPD is purchasing a large stage to support events in the parks as well as a large outdoor movie screen to offer an alternative type of evening activity in the parks.

State Forestry Division (Contact: Arthur “Butch” Blazer)

Harvest regulations compliance. The Forestry Division is ensuring that industry is complying with forest harvest regulations to ensure water quality standards are met.

Forest and Watershed Health Plan. EMNRD is protecting water quantity and quality through collaboration with state and federal agencies and local units of government and communities on projects such as: forest thinning, the development of community wildfire protection plans, and the delivery of good science to private and public landowners for restoration and monitoring of watersheds.

Implement fire restrictions. Forestry has implemented fire restrictions in areas of the state where there are occurrences of human-caused fires and where high fire danger exists. The Division also conducts other fire prevention activities, such as Smokey Bear presentations and a media blitz for Wildfire Awareness Week.

Pre-positioned resources. The Division prepositions fire suppression resources in areas of the state to provide for fast response times to wildland fires. The pre-positioning helps keep new fires small and less costly when compared to large catastrophic fires that threaten or burn into communities.

Interagency season planning and training. Forestry works all year to develop initial attack plans and legal agreements with federal, state and local partners to ensure a fast and safe response to wildland fires in all jurisdictions in New Mexico. The Division also provides basic and advanced training to more than 500 paid and volunteer local government firefighters each year.

Community wildfire protection planning. The Division is working with many communities at risk from wildfire to develop Community Wildfire Protection Plans. These plans identify areas at risk in the communities, as well as set project and other priorities that mitigate the threat of wildfire, which is increased by drought.

Salt cedar interagency cooperation. Forestry has been working with interagency cooperators and private landowners to reduce the threat of wildfire and improve forest health in the Middle Rio Grande Bosque. Work with similar groups has also been occurring in all major New Mexico riparian ecosystems in the state.

Landowner management planning. The Division works with private landowners, who want to improve and protect their property's habitat by generating management plans. The plans outline recommendations on how to manage their forests for wildlife habitat, recreation, fire safety, forest health and protection from forest insect and disease epidemics, all of which are affected by drought.

Youth Conservation Corps (Contact: Wendy Kent)

The YCC program funds many projects that have improved New Mexico's natural resources that have an impact on drought conditions.

Corps members have been involved in thinning projects on at least 7 USFS Ranger Districts, the Bosque and City Parks. The excessive vegetation has either been removed from the site or piled for burning or used to improve wildlife habitat. Not only does the removal of excessive vegetation reduce the use of water from this unwanted vegetation, it also helps to reduce fire danger and improve habitat diversity.

Many other projects have involved xeriscape installation at public facilities. Native or low water use plants and drip irrigation systems are being installed to replace landscapes that have plants or grass that use an extensive amount of water. Some of these projects also include water catchments systems.

Some of our other projects involve the installation of erosion control structures to reduce water runoff, stream bank deterioration and silting of New Mexico's streams and rivers.

Every one of these projects involve an educational component that provides information and hands on experience to the Corps members regarding watershed health, water use reduction, fire

prevention, xeri plants, drip irrigation, soil and water conservation and many other environmental principles that help New Mexico's young people become "conservationists."

Mining and Minerals Division (Contact: Bill Brancard)

Mine reclamation. MMD requirements reduce contamination of ground water and surface water supplies. Areas disturbed by mining are re-graded, covered and re-vegetated to prevent erosion and leaching of contaminants.

Abandoned coal mines. Sites have been reclaimed where mine waste piles are eroding into, and degrading, watercourses. Recent examples include reclamation of historic coal mine waste piles in Sugarite and Yankee Canyons near Raton.

Flexible reclamation standards. During droughts, companies are allowed to demonstrate success in non-consecutive years to meet regulatory standards.

Oil Conservation Division (Contact: Mark Fesmire)

Additional rules. OCD promulgates and enforces rules specifically designed to protect groundwater and surface water supplies.

Compliance and enforcement. Rules are designed to minimize pollution and punish offenders:

Surface waste management rules prevent salt and hydrocarbon contamination of surface and ground water.

Pit rules encourage safer handling of waste and contaminants to protect water supplies.

Produced water. OCD supports efforts to use produced water by:

Issuing discharge permits for experimental treatment projects that produce useable and environmentally safe water from oil production wastes.

Drafting rules to facilitate the use of produced water in applications that re-place fresh water.

Secondary recovery. OCD supports environmentally sound recovery and carbon sequestration projects, including permitting and participating in pilot projects using CO₂ for secondary oil recovery and coal bed methane secondary recovery.

NEW MEXICO FINANCE AUTHORITY

The New Mexico Finance Authority (NMFA) has provided effective financial and administrative support to combat the on-going drought in New Mexico. NMFA has several programs which can be applied to assist in the drought relief efforts:

The Public Project Revolving Loan Fund (PPRF)

- Interest rates are based on insured bond market rates
- Up to \$200,000 in disadvantaged entity funding at 0% & 3% interest rates are available based on the entities Median Household Income (MHI)
- Costs of Issuance, up to \$200,000 per fiscal year, may be paid by the NMFA
- Can close on the loan as soon as 60 days after NMFA Board approval
- Since 2004, the NMFA has closed on 26 water and wastewater projects totaling \$233,798,220
- Can fund projects under \$1 million without specific Legislative Authorization
- May give special consideration to projects that are:
 - Affected by the drought
 - Exhibit water conservation practices
 - Maximize the re-use of water
 - Have innovative solutions to the drought
 - Regionalizing water systems
 - Rebuilding and improving acequia's
 - Exemplifying the efficient storage of water
 - Focused on fire suppression

Local Government Planning Fund:

- Provides upfront capital necessary to allow for proper planning of vital water and wastewater projects which include:
- Feasibility reports
- Preliminary engineering reports
- Master plans
- Conservation plans
- Economic development plans

Statute requires that the entity repay the grant if funding for the project is received. If the entity finances the project through the NMFA, the grant will be forgiven. Since 2004, the NMFA has closed on 47 projects totaling \$ 1,047,709. Documents must be submitted by the consulting engineers and approved by the NMFA prior to disbursement of funds.

Water Trust Board (WTB)

The NMFA administers the WTB. The WTB provides funding for water storage, conveyance & delivery, watershed restoration and management, water conservation measures, flood prevention and Endangered Species projects. The WTB is a one year process that requires Legislative Authorization. Since 2003, the NMFA has closed 48 WTB projects totaling \$45,170,559.

Drinking Water Revolving Loan Fund (DWRLF)

The DWRLF provides low-cost financial assistance for construction and improvements to drinking water facilities. If the project qualifies for a categorical exclusion, the project can close in approximately 6 months. The categorical exclusion is for a population of 10,000 or less and can be used for specific projects such as:

- Replacement of existing distribution lines within the same rights-of-way or easements
- Rehabilitation of existing equipment and structures.
- The construction of structures on existing sites
- Since 2004, the NMFA has closed 15 DWRLF projects totaling \$55,345,392

Emergency Drought Relief (EDR)

The EDR was created in 2002 by Executive Order by the Office of the Governor. Thirteen projects totaling \$2,241,973 were funded pursuant to the Disaster Relief Act, (NMSA 1978).

The WTB created a sub-committee which reviewed each project and recommended approval to the WTB.

The NMFA administered the program and the financing associated with all EDR projects.

The NMFA also staffed the Drought Hotline that was put in place by the WTB.

PLEASE FIND THE 2006 RECOMMENDATIONS BELOW. THEY REMAIN APPLICABLE FOR THE 2008 REPORT.

NEW MEXICO ENVIRONMENT DEPARTMENT

Drinking Water Bureau

The Capacity Development Program works to build financial, managerial and technical capacity at public water systems so they are capable of developing sustainable infrastructure, develop realistic rates to deal with future capital and operations and maintenance costs, and emergencies.

Source Water Protection and Wellhead and Watershed Protection programs focus on preserving the quality of the water available to public water systems by evaluating the susceptibility of each system to various contaminants, such as nitrates in groundwater, that are used to develop individualized wellhead and watershed protection plans.

Emergency Coordination with the Department of Public Safety, the Department of Health through a Joint Powers Agreement, and local governments to coordinate aid for communities that suffer outages due to drought conditions or other problems. The Department works with DPS to coordinate water hauls and works with DOH to manage and control water borne illness outbreaks, and coordinates with the New Mexico Finance Authority when the Department declares emergency situations for water systems due to water outages. The Department investigates potential threats to public health and safety and recommends NMFA grant emergency funds to water systems address the situation.

The Department offers technical assistance and training through contractors, such as the New Mexico Rural Water Association, which is focused on operations and management and certified

water operator training, and the Rural Community Assistance Corporation, which is focused on technical assistance and training on financial and managerial issues.

Department staff also offers public water systems technical assistance and training on financial, managerial and technical issues internally.

Emergency Preparedness

Developing Comprehensive Performance Evaluations and Area-Wide Optimization Programs for surface water systems across the state.

NMED plays a support role during and after a drought emergency. In this capacity, NMED will assist the Department of Public Safety and the Department of Health in responding to emergencies. NMED staff will assist in surveillance and sampling efforts and provide technical information on human health and the environment as related to the drought, as appropriate.

Will cooperate with the National Guard to initiate measures for furnishing drinking water during situations in which the source of water has been contaminated (NMED has neither the equipment nor the expertise to actually provide water in an emergency). No person or agency shall provide emergency supplies of drinking water unless the supplies have been determined to be safe by the NMED Drinking Water Bureau.

Will provide sound scientific information regarding the quality of drinking water to other agencies and the public.

Will work to identify funding sources to aid in disaster relief for drinking water systems and provide advice on technical issues to drinking water suppliers.

Notify the public regarding the seriousness of the emergency and providing the public with appropriate procedures to minimize health risks from contaminated drinking water.

Construction Programs Bureau

Established a process to expedite loan applications for emergency funding.

Surface Water and Ground Water Quality Bureaus

GWQB and SWQB are sampling quarterly in the Lower Rio Grande to determine and track the effects of drought.

Based on a rotational schedule, NMED is intensively sampling the western half of the Canadian watershed, Valle Vidal, and the Dry Cimarron watersheds during 2006. Since we anticipate some of the streams we are monitoring in these areas may dry up, we are modifying our normal sampling plan slightly to be sure to monitor the bulk of parameters in the spring and early summer before the streams go dry.

GWQB and SWQB are enforcing Water Quality Control Commission regulations designed to protect ground water and surface water supplies.

NMED is encouraging reduction in waste generation and recycling of waste-water through its Pollution Prevention and Mining Environmental Compliance Programs, which in turn reduces the use of fresh water.

District Offices

Field staffs are educating citizens in their districts on the ramifications of wild fire and the impact it could have on available water supply, such as contaminated water supplies from ash flows and increased water demands for fire fighting uses.

Air Quality Bureau

Per state regulation, the AQB tracks and receives reports of controlled and wildfire burns throughout the state. State regulation also requires notification of the public for controlled burns. The reports can be mapped to determine areas that may be impacted by enough smoke to create unhealthy conditions for the public. In areas already inundated by smoke, prescribed burn permits will be denied. The AQB collaborates with federal agencies to issue press releases regarding wildfire and the levels of air pollution associated with these fires. Some sectors of the population are extremely sensitive to the pollutants emitted from wildfire and controlled burns, so it is important to provide information and forewarning regarding the expected and current air pollution levels within the state.

The AQB has equipment and expertise to monitor particulate matter from wildfires and controlled burns. The AQB often partners with federal land management agencies to monitor air pollution from controlled burns and wildfire.

Governor Richardson's climate change initiative will help to reduce greenhouse gasses that are responsible for increasing temperatures that exacerbate the effects of drought in the Southwest. Scientists tell us that increasing temperatures due to global warming cause reduced snowpack, earlier and quicker spring runoff, increased and more severe forest fires and increased evaporation from water bodies and soil.

DEPARTMENT OF INDIAN AFFAIRS

IAD continues to apprise and work with the State's 22 Nations, Tribes, and Pueblos regarding the ever-changing drought situation in New Mexico. IAD will continue to monitor local drought conditions in Indian country, particularly as they impact or relate to pending legislation or existing water projects within those areas. IAD continues to serve as a conduit of information to the Tribes for the Drought Task Force.

DEPARTMENT OF FINANCE AND ADMINISTRATION

Water Innovation Fund. The Department of Finance and Administration is working with local communities throughout the state to implement innovative water technology that will save water and demonstrate the successful use of these technologies. In FY05-06, more than \$3.0 million was awarded to projects that are estimated to save 1.67 billion gallons of water. Another \$3.0

million was appropriated in the 2006 session. The Department of Finance and Administration will work to ensure that these funds are awarded in a timely manner to projects that will conserve water throughout the state.

Efficient Infrastructure for Colonias. The Department of Finance and Administration is working to distribute \$5.0 million that was allocated in the 2006 Session for infrastructure improvements at colonias. The Agency is also attempting to leverage these funds with federal USDA dollars for infrastructure improvements. More efficient water and wastewater systems will conserve water supplies and protect the quality of water resources.

Support Local Government Water and Wastewater Projects. The Local Government Division at the Department of Finance is responsible for distributing funding for many local water and waste water projects, including a group of projects selected as examples of implementing new technologies in a scope and scale that demonstrates the viability of the technology. More than \$22.5 million was appropriate for these strategic projects, as well as significant funding for local water and wastewater projects.

Support Water System Regionalization. The Department of Finance and Administration is working closely with the New Mexico Environment Department to promote water system regionalization projects. The Governor requested \$10.0 million for this purpose and the 2006 Legislature appropriated \$3.0 million. Water system regionalization, in most cases, will increase overall system efficiency and lead to water savings. The Department of Finance and Administration will work to ensure that these funds are distributed in a timely manner.

ECONOMIC DEVELOPMENT DEPARTMENT

The Economic Development Department is working to better integrate water conservation with business development and recruitment.

The Department is convening a working group of New Mexico business representatives and EDD staff to consider ways New Mexico could encourage conservation by existing business and facilitate the recruitment and expansion of water efficient industries. The group will examine ways that state incentives could be modified to encourage water conservation. It will also identify aspects of New Mexico's tax code -- such as the preferential tax treatment of sprinklers relative to drip systems -- that may actually work to *discourage* water conservation. Finally, the group will examine financing mechanisms such as a bonding fund for water conservation retrofits and equipment capitalized with revenue generated by the cost savings attributable to those improvements.

Participants in the group's first meeting agreed that the state should recognize businesses that were exceptionally innovative or conscientious in their use of water through an annual award to be presented by the Governor. To gain statewide, broad-spectrum support, the group suggested that regional awards be presented to both small and large businesses over the course of the year and that the annual Governor's award winner be chosen from among the year's regional winners.

Meeting participants agreed that conservation efforts by business would benefit from an Internet-based one-stop shop for state and local water conservation incentives. Users of such a site would input their geographic location and type of business and would be provided with a list of state and local incentives for which they might be eligible.