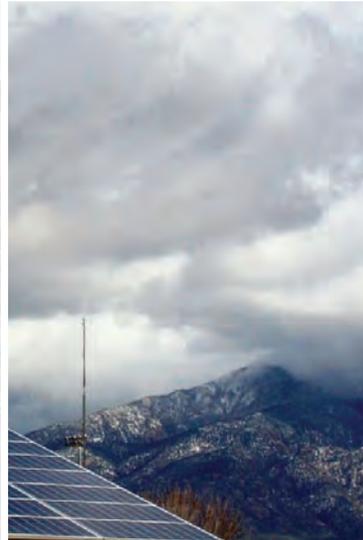




New Mexico Energy, Minerals and Natural Resources Department

ANNUAL REPORT



2011

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Photo by: Lauren Aguilar



Photo by: Dan Ware

The logo features a stylized sun with yellow rays on the left, followed by a series of horizontal lines in blue, green, and brown that sweep across the top. Below this graphic, the year "2011" is written in a large, grey, sans-serif font. Underneath the year, the text "New Mexico Energy, Minerals and Natural Resources Department" is written in a smaller, grey, serif font, and "ANNUAL REPORT" is written in a bold, grey, sans-serif font at the bottom.

New Mexico Energy, Minerals and Natural Resources Department  
2011  
ANNUAL REPORT



Photo by: John Kretzmann



Photo by: Ken Hughes

# Energy, Minerals and Natural Resources Department

John H. Bemis  
Cabinet Secretary-Designate

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Deputy Secretary

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State Forestry Division

Fernando Martinez, Director  
Mining and Minerals Division

Jami Bailey, Director  
Oil Conservation Division

Tommy Mutz, Director  
State Parks Division

Alexis Lotero, Director  
Administrative Services Division

Anne deLain W. Clark, Coordinator  
Radio Active Waste Consultation Task Force

# V

ision:

A New Mexico where individuals, agencies and organizations work collaboratively on energy and natural resource management to ensure a sustainable environmental and economic future.

# M

ission:

To position New Mexico as a national leader in the energy and natural resources areas for which the department is responsible.

# Natural

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Photo by: Anne deLain W. Clark

# Resources

# John Bemis

## Cabinet Secretary-Designate



## Energy, Minerals and Natural Resources Department

### *A Message from Cabinet Secretary-Designate John Bemis*

The Energy, Minerals and Natural Resources Department (EMNRD) strives every day to make New Mexico a better place to live, work and recreate. EMNRD's responsibilities are as diverse and engaging as the state itself, from fighting relentless fires to protecting magnificent state parks, producing oil, natural gas and mining minerals like copper, coal and potash that help sustain us, to harnessing the wind, sun and other renewable resources to lead the way to the future.

Hard work, dedication and commitment are the hallmarks of every EMNRD employee. It shows up on the fire line and at every state park, through the responsible oversight of oil, natural gas and mining operations and the use of leading edge technologies to reduce energy consumption across the state. New Mexico demands responsible stewardship and all at EMNRD are committed to that goal.

As we begin 2012 and the celebration of New Mexico's first one hundred years of statehood we hold a commitment to the best parts of our past while fulfilling the promise that each generation makes to the next to pass on a state of majestic beauty and boundless opportunity.



Governor Susana Martinez

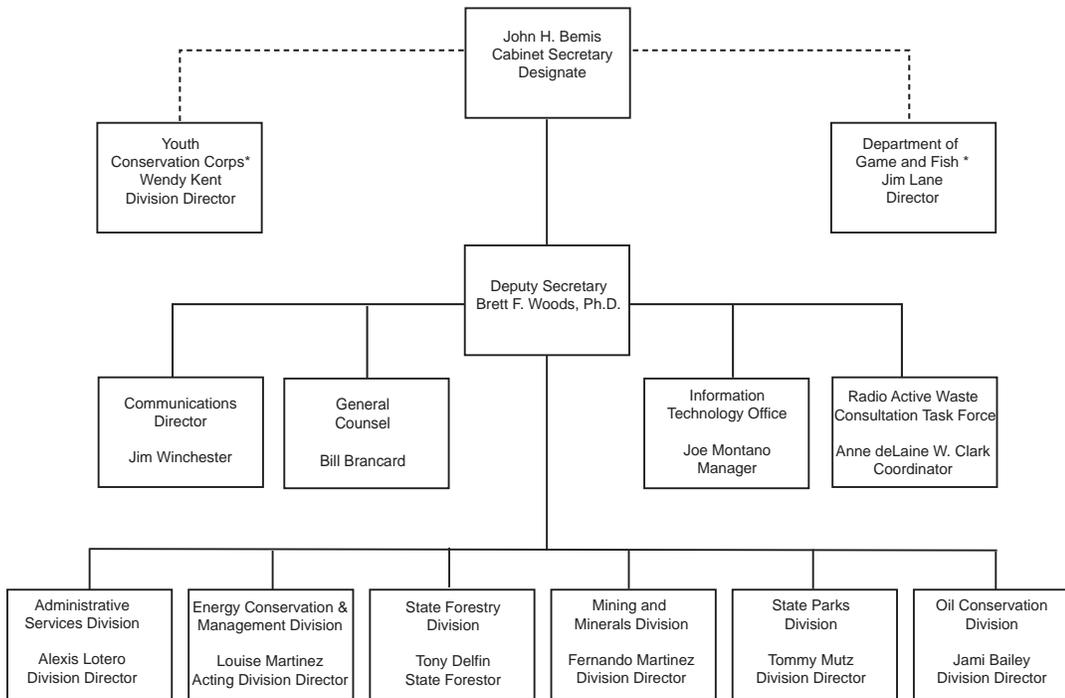
# Organization

## Chart



Photo by: Bob Sivinski

## Energy, Minerals and Natural Resources Department



\* Administratively Attached. No direct budget support from EMNRD



## **PROGRAM LEADERSHIP AND SUPPORT**

Program Leadership and Support provides leadership, sets policy and assists the divisions in achieving their goals. Program Support for budget purposes consists of the Office of the Secretary (OFS), Administrative Services, and the Information Technology Office, which provide administrative support functions—legal, human resources, fiscal and information technology. OFS also administers the Waste Isolation Pilot Plant Transportation Safety Program.

### **Office of the Secretary**

OFS provides leadership, strategic planning and policy direction, and establishes procedures for the department and program performance. OFS oversees all divisions within the department; it also houses the Administrative Services, Human Resources, Office of Information Technology, Public Information, General Counsel, and the Waste Isolation Pilot Plant Transportation Safety Program.

OFS serves as the focal point for the department's communications with the Governor, legislators, other state agencies (including the Department of Game and Fish and the Youth Conservation Corps which are administratively attached to EMNRD). It establishes department policies and provides legal, programmatic, and public outreach direction to the divisions.

### **Administrative Services**

The Administrative Services Division (ASD) oversees the agency's finances and property. Specific functions include budget, procurement, accounting, payments, federal grant reporting, and property and material management. Among ASD's duties is the processing of payment vouchers, travel documents, purchase orders, and deposits, for the department's daily operations. ASD also coordinates the annual financial audit and prepares the annual financial statement and related footnotes for governmental funds..

### **Human Resources**

The Human Resources Bureau (HRB), within ASD, provides services and information for applicants, employees and employers throughout the state. HRB verifies that the department follows all rules, regulations and laws governing employment; guides managers and supervisors through a variety of employment issues; and helps employees to understand the rules and laws. HRB helps employees with position classification, compensation and discipline. HRB also provides guidance on medical leave and workers' compensation.

### **Information and Technology Office**

The Information and Technology Office is the central information technology and information systems provider for the department's 509 employees and 54 remote sites. It employs 18 technical positions that are responsible for maintaining and supporting EMNRD's computer systems, network-telecommunications infrastructure and application development needs, using the latest technology for Windows and Web applications on the Intranet and Internet.

## Public Information Office

The Public Information Office manages the dissemination of information to the general public, media organizations and other inquiring entities. It coordinates and synthesizes information from EMNRD's divisions to write speeches, news releases, and articles. It serves as project manager for department-wide publications such as the annual report, strategic plan, and other reports as needed. It coordinates and oversees EMNRD's internal communications, including Internet and Intranet, newsletters, memos, award ceremonies and other department-wide events. The office works closely with all divisions housed within EMNRD providing guidance on marketing and public relations issues.

## New Mexico Radioactive Waste Consultation Task Force - Waste Isolation Pilot Plant Transportation Safety Program

Under EMNRD's leadership, and through the New Mexico Radioactive Waste Consultation Task Force, six other state agencies (Department of Public Safety, Department of Homeland Security and Emergency Management, Department of Health, Environment Department, Department of Transportation, and State Fire Marshal's Office) collaborate on the Waste Isolation Pilot Plant (WIPP) Transportation Safety Program. The program ensures the safe and uneventful transportation of radioactive waste in the state of New Mexico. The program includes the setting and updating of policies and operating procedures; training and equipping emergency responders along all of New Mexico's WIPP shipping routes; keeping the public informed on radioactive materials issues; monitoring and maintaining highway safety; and inspecting all WIPP shipments at their points of origin or at the New Mexico ports of entry.



**Energy Conservation  
and  
Management  
Division**



## Energy Conservation and Management Division

**MISSION:** The Energy Conservation and Management Division (ECMD) develops and implements effective clean energy programs—renewable energy, energy efficiency and conservation, clean fuels and efficient transportation—to promote environmental and economic sustainability for New Mexico and its citizens.

**PROGRAMS:** ECMD oversees and implements the state's programs in clean energy: the Renewable Energy Program, the Energy Efficiency in Buildings Program, and the Clean Fuels and Efficient Transportation Program. These programs are implemented through a combination of Tax Credit Certifications and Clean Energy Projects. Through these efforts, ECMD encourages public and private organizations to use energy more efficiently, more economically, and with less dependence on foreign sources. In addition, New Mexico benefits from economic development and the jobs created.

For additional information on ECMD programs, see [www.CleanEnergyNM.org](http://www.CleanEnergyNM.org).

## Accomplishments

**TAX CREDIT CERTIFICATIONS:** ECMD manages several certification programs for renewable energy systems and energy efficiency in buildings, which yield benefits to participating New Mexico citizens and corporations in the form of tax credits. Combined with other state, federal, and utility incentives, clean energy is made more affordable and creates economic development opportunities for New Mexico businesses.

**The Renewable Energy Production Tax Credit (PTC)** - is supporting utility-scale wind, biomass, and solar projects. There are now 700 megawatts (MW) of wind and 38 MW of solar operating in New Mexico. In the last 12 months through October 2011, five applications for solar power plants and one for a wind farm were received, reviewed, and processed by ECMD. One certification for a solar generator was issued. Although the wind-biomass portion of the PTC has reached its ceiling of available tax credits, retirement of tax credits issued to older certified generators will begin in 2013, making those funds available for other approved projects. Tax credits remain available for solar projects; however, the ceiling may be reached in the next year.

**The Solar Market Development Tax Credit** - helps to make residential-scale solar systems more affordable. In the last 12 months, there has been solar development in 23 out of 33 New Mexico counties. A total of 1,140 system certification applications were received, reviewed, and processed during this latest annual period (1,006 photovoltaic, 134 thermal). This represents 4.7 MW of renewable electricity and 16,000 square feet of solar thermal collector area.

Upgraded solar thermal heating and cooling system at the Mechanical Engineering Building, University of New Mexico.



Photo by: Edward Trujillo

**The Sustainable Building Tax Credit** - incentivizes energy-efficient and green design techniques in residential and commercial buildings. For residential development, the past 12 months has seen 468 applications received, reviewed, and processed by ECMD, covering 720,000 square feet of floor area. On the commercial side, two applications were received, reviewed and processed, for a total of 518,000 square feet. These new homes and commercial buildings, meeting ENERGY STAR, LEED, or Build Green New Mexico standards, have been constructed and provided jobs in 25 counties.

**The Geothermal Ground-Coupled Heat Pump Tax Credit** - has now been through its first year of helping to make this system type more affordable for homeowners and commercial building owners. There have been a total of 18 applications received, reviewed, and processed in the past 12 months. Activity has been seen in nine counties.

ECMD manages all of the above tax credit certification programs according to the respective underlying statutes and administrative rules. In 2011 a rulemaking process was conducted for an additional tax credit certification program: the Agricultural Biomass Tax Credit. Applications will be accepted beginning in 2012.

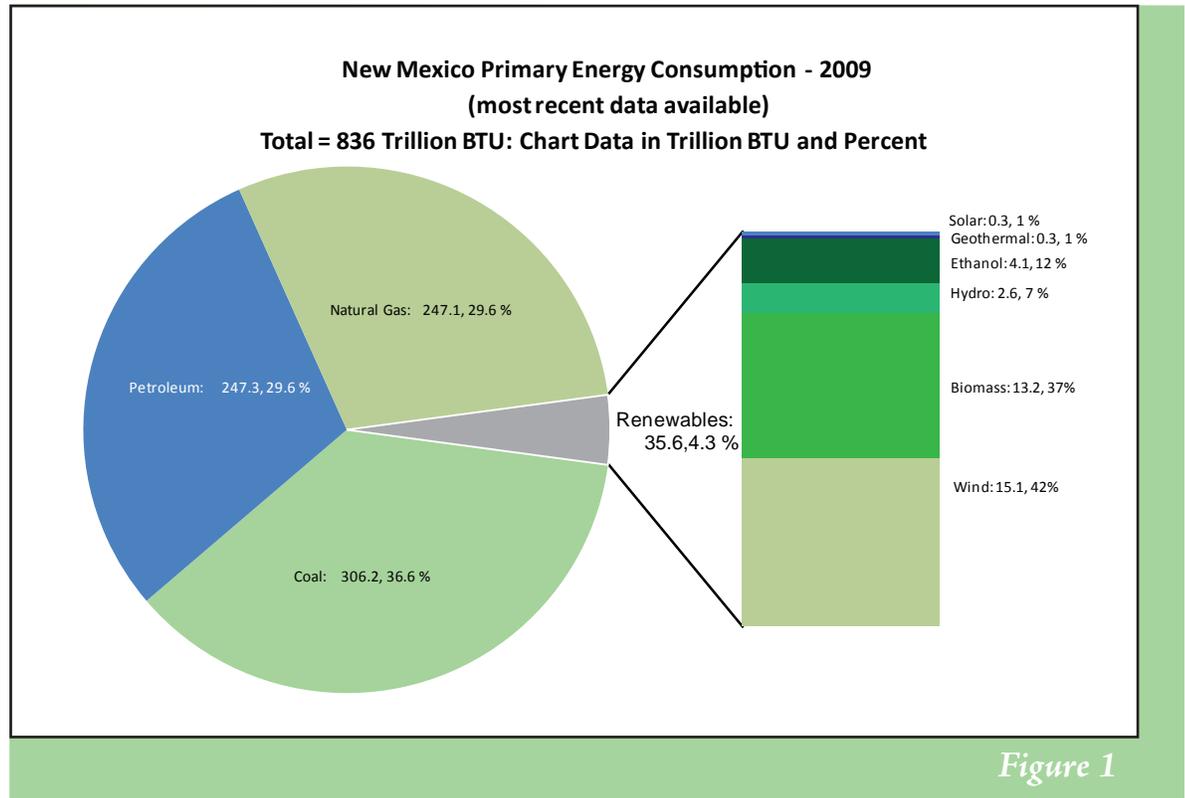
**CLEAN ENERGY PROJECTS:** The American Recovery and Reinvestment Act of 2009 has yielded many benefits to the state in clean energy, through U.S. Department of Energy programs managed by ECMD: the State Energy Program, Energy Efficiency and Conservation Block Grant, State Energy Efficient Appliance Rebate Program, and Energy Assurance Planning Program. The many clean energy projects initiated by ECMD are assisting our schools, universities, state agencies, tribal organizations, cities, and counties to be energy efficient and to reduce costs.

ECMD managed over 75 clean energy projects in 2011 in various phases of implementation and monitoring, with many completed during the year. A sample of building upgrade projects showed that 22 percent energy savings is being achieved. Over \$400,000 in annual utility bill savings has been established in these facilities, which are owned and operated by taxpayer-funded schools, higher educational institutions, state agencies, tribal organizations, cities, and counties. Additional cost reduction in government operations is anticipated as more clean energy projects are completed.



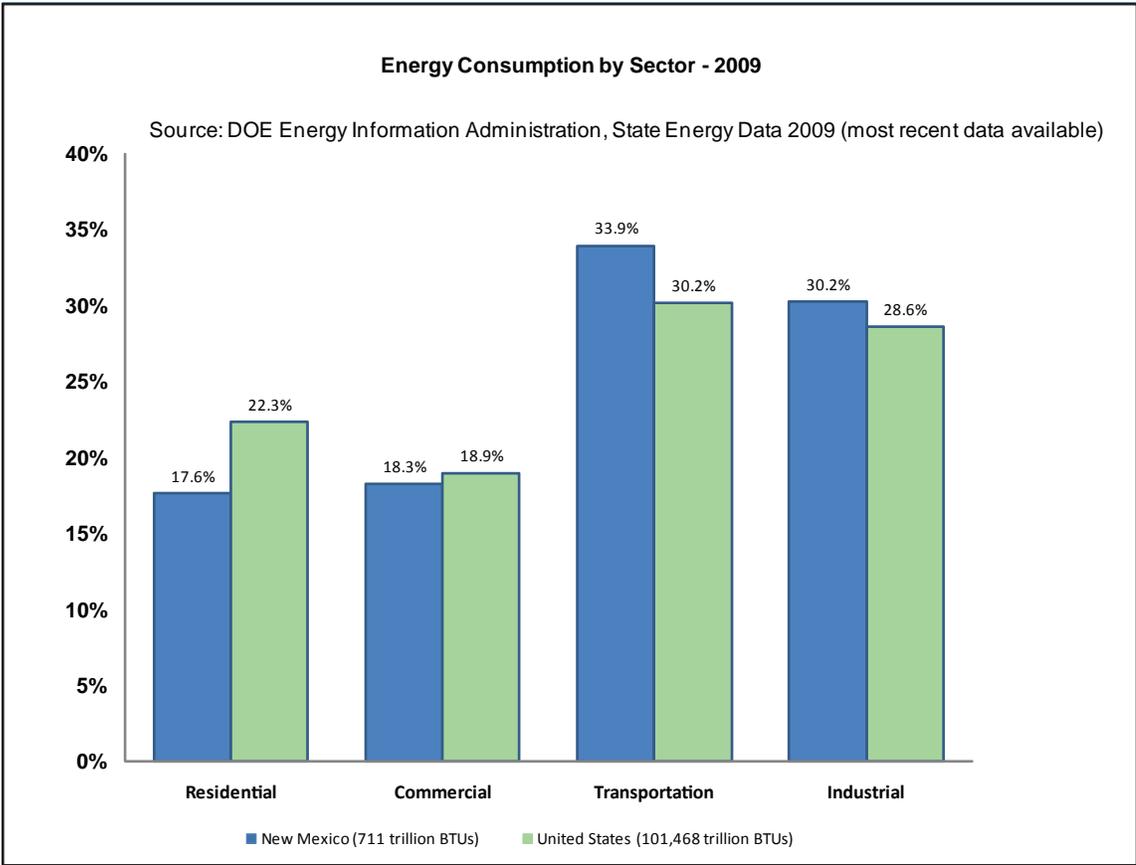
## Data and Statistics

**ENERGY CONSUMPTION:** Total New Mexico energy consumption was 836.2 trillion BTU (tBTU) in 2009. Most of the energy consumed in the state came from coal (306.2 tBTU), followed by petroleum (247.3 tBTU) and natural gas (247.1 tBTU) resources. In 2009, renewables contributed 4.3 percent or 35.6 tBTU. Although this is relatively small, wind and solar each have seen significant growth since 2003. Net energy consumption for in-state needs was actually 670 tBTU after subtracting the energy used for exported electricity (Figure 1).



Of New Mexico's net energy consumption in 2009, the industrial sector consumed the most energy at 33.9 percent (227.4 tBTU), followed by the transportation sector at 30.2 percent (202.4 tBTU), the commercial sector at 18.3 percent (122.4 tBTU) and the residential sector at 17.6 percent (118.0 tBTU). New Mexico's residential sector consumed less energy out of total consumption compared to the nation, the commercial sector consumed about the same energy as national percentages and the transportation and industrial sectors consumed more (Figure 2).

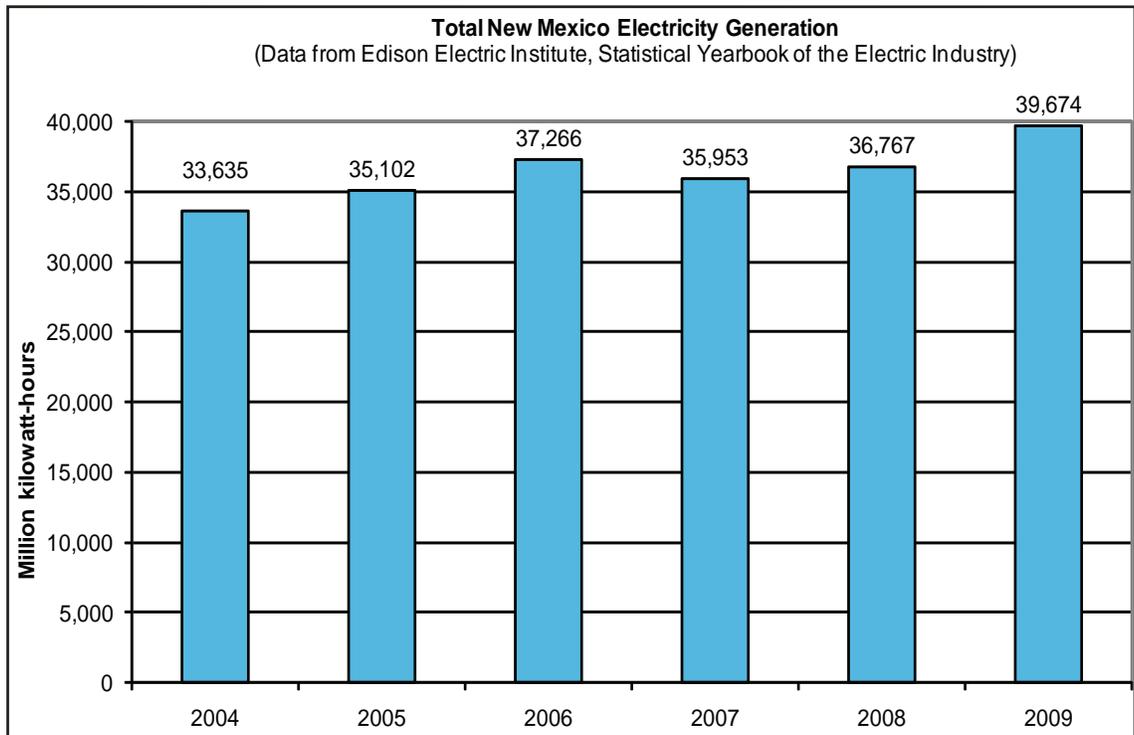
**RENEWABLE ENERGY CONSUMPTION:** Total New Mexico renewable energy consumption was 35.6 tBTU in 2009. This has increased steadily from 8.2 tBTU in 2002. Of the current renewable energy consumption, wind accounted for 42 percent (15.1 tBTU), biomass 37 percent (13.2 tBTU), ethanol 12 percent (4.1 tBTU), hydroelectric 7 percent (2.6 tBTU), solar 1.0 percent (0.3 tBTU) and geothermal 1.0 percent (0.3 tBTU). Wind energy development has been the major reason for growth in renewable energy consumption in the state since 2003. Nationally, wind is the third largest renewable resource after biomass and hydropower.



*Figure 2*

**ELECTRICITY:** Electricity supply affects industrial growth in both the energy and non-energy sectors of the state’s economy. Electric utilities consume substantial amounts of natural gas and coal resources extracted in the state, generating considerable revenues in the process. New Mexico’s power plants have a total capacity of more than 6,000 MW, about 60 percent of which is located at two coal-fired plants near Farmington: the Four Corners and San Juan Generating stations.

Approximately one-third of the electricity generated in New Mexico is consumed in other states. Total electricity generation for the past several years is shown in Figure 3 on the next page. Electricity generated in 2009 increased by 7.9 percent over 2008 and reached a new annual high of 39,674 million kilowatt-hours (kWh). In 2009, electricity generation in New Mexico was 77 percent from coal, 18 percent from natural gas, 3.8 percent from wind, and 0.7 percent from hydropower.



*Figure 3*

Investor-owned utilities in New Mexico serve approximately 71 percent of the customers (Figure 4). The 20 rural electric cooperatives serve about 21 percent of the customers, although they service about 85 percent of the state's land area. Tri-State Generation and Transmission Association is a wholesale supplier of 13 member cooperatives. There are seven municipal electric utilities serving the remaining 8 percent of the state's electricity customers.

As of 2009, the number of New Mexico customers buying electricity and the price paid per kWh has been on an increasing trend for many years, but New Mexico's prices still remain low compared to the rest of the U.S. The price paid in New Mexico increased 14 percent in the residential sector, 12 percent in the commercial sector, and 9 percent in the industrial sector over the six-year period of 2004 through 2009. As of 2009, New Mexico's prices compared to average U.S. prices were 13 percent lower in the residential sector, 17 percent lower in the commercial sector, and 16 percent lower in the industrial sector.

**CARBON DIOXIDE EMISSIONS:** Carbon dioxide emissions from the consumption of energy sources amounted to 59 million metric tons in 2009. Emissions from coal were 50 percent (29 million metric tons), petroleum 28 percent (16 million metric tons) and natural gas 22 percent (13 million metric tons). Almost all of the coal consumed generated electricity.

2009 is the latest calendar year with data available from sources DOE Energy Information Administration and Edison Electric Institute.

**Number of Customers per Utility - 2009**  
(data from USDOE, Energy Information Administration)

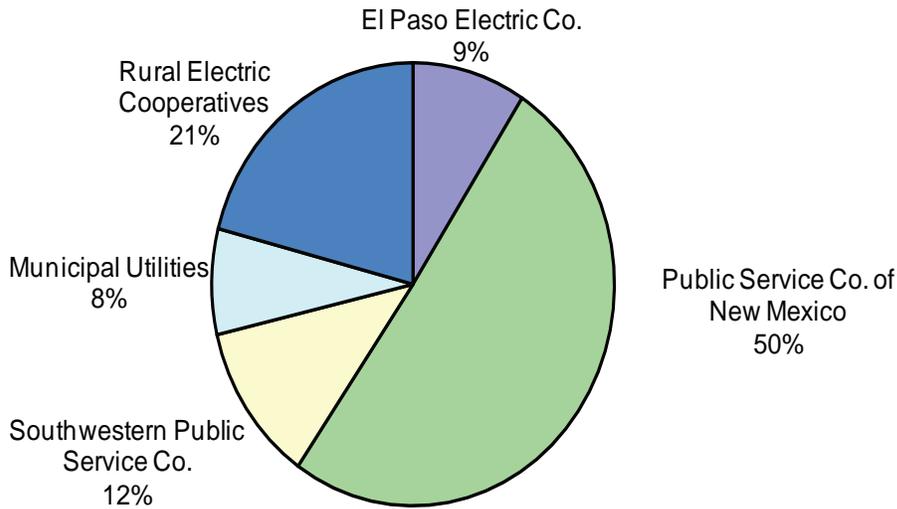


Figure 4

**ENERGY EXPENDITURES:** New Mexico's 2009 primary source energy expenditures were \$5.6 billion. Most expenditures were for petroleum at \$4.2 billion (75 percent). Natural gas expenditures were \$793 million (14 percent), coal \$582 million (10 percent) and renewable energy \$49 million (1 percent, all biomass). For the renewable energy forms of wind, solar, hydroelectric and geothermal, there were no fuel expenditures. With these energy sources needing no processing, there are no fuel costs incurred in providing energy to end users.



**State  
Forestry Division**



## State Forestry Division

**MISSION:** State Forestry Division (Forestry) retains lead responsibility for wildland fire management on non-federal and non-municipal lands, maintaining fire suppression capacities and emphasizing firefighter and public safety. Forestry promotes healthy, sustainable forests in New Mexico for the benefit of current and future generations.

Forestry is responsible for fire suppression on 43 million acres of non-municipal, non-federal and non-tribal land across the state and assists New Mexico communities by evaluating those most at risk to wildfire and insect infestation by developing appropriate management programs and implementing mitigation projects.

Forestry staff members provide technical assistance to landowners for developing sustainable forests that enhance quality of life by providing tree care training, distributing low-cost seedlings, developing resource management plans, and delivering forest health project funding.

**PROGRAMS:** A Forestry priority is to assist in the continued development of the forest products industry (e.g., landscaping, construction, woody biomass) that uses land treatment byproducts. In addition, Forestry oversees an inmate work camp, which utilizes trained minimum-security inmate crews for work on conservation projects and wildland fire suppression.

Forestry regulates the harvest of commercial forest species on private forestland and conducts habitat protection projects by studying plant species abundance, defining ecosystems, acquiring easements and purchasing key properties.

Forestry operates the New Mexico Forest and Watershed Health Office (FWHO) which works to implement projects and programs with a goal of improving overall forest and watershed health statewide.

Landowners and communities receive assistance with fire prevention and preparedness planning, forest management and improvement, urban and community forest development and management, conservation easement and tax incentive programs, and numerous educational presentations on these topics.

## Accomplishments

**OVERVIEW:** Despite experiencing the busiest fire season in recent history, Forestry has been able to treat more than 17,000 acres of state and private land during the calendar year. These treatments are a vital tool in establishing and maintaining not only good forest and watershed health, but wildfire protection for homes and communities as well.

Over the past year significant acreage of New Mexico's forests and woodlands have slowly become peppered with dead and dying trees. The persistent drought conditions have stressed the state's trees, predisposing them to attacks by tree-killing bark beetles. While these beetles are a native and natural part of the forest they are also opportunists. As trees are more stressed they become more susceptible to the rice-sized insects and the beetle population is able to rapidly increase. New Mexico's trees have come under attack from a variety of species that rely on favorable environmental conditions to increase their populations. The annual forest insect and disease survey across all land ownerships shows over 160,000 acres of forest affected by bark beetles in 2011. As a reference, the 2010 survey showed 20,940 bark beetle impacted acres and 36,670 acres in the 2009 survey. It is important to note that this increase is closely related to the current drought the state is experiencing and the predicted prolonged drought could exacerbate the beetle outbreak in the coming year. State land managers are working closely with their federal counterparts to address this important issue through appropriate forest treatments, monitoring of the outbreak, and public outreach including organizing workshops to educate both public and government land managers on the current situation and what they can do on their lands and in their communities.

**FOREST INVENTORY ANALYSIS:** With funds from the American Recovery and Reinvestment Act (ARRA), the most comprehensive inventory of forests and woodlands in New Mexico is currently being conducted. Foresters and forestry technicians from across the state, including three tribes, are in the woods gathering complex and detailed information about New Mexico's forests. These data create a solid baseline, which is important to track the impacts of drought and predicted future climate changes. The project has employed 60 people and has collected data on 2,568 plots of land across the state.

**FOREST AND WATERSHED HEALTH:** Forestry's district offices, Inmate Work Camp Program and Forest and Watershed Health Office continued addressing issues that have traditionally been a barrier to proper treatment and land management on private and non-federal public lands in New Mexico through the implementation of the New Mexico Forest and Watershed Health Plan, and the New Mexico Statewide Resource Assessment. This implementation occurs through support for local on-the-ground efforts; state-level strategic planning and coordination; and state-level management and administration. Working in collaboration with local, state and federal partner agencies, some of Forestry's efforts toward promoting forest and watershed health included the:

**Sugarite Watershed Project** – The purpose of the project is protection of the watershed that supplies water to the City of Raton's reservoirs that subsequently burned during the 19,970 acre Track Fire in 2011. With technical assistance from Forestry staff, 62 of 72 acres have been treated between the State Park boundary and the Colorado state line.

**Greater Rio Grande Riparian Restoration Project** – The project began in May 2011 and will reduce fire risk, restore riparian forest health, and improve habitat connectivity in the bosque adjacent to the Rio Grande main stem and major tributaries. The first portion of the on-the-ground work began with a project on Kewa Pueblo and will continue with projects in Rio Arriba, Santa Fe, Sandoval and Valencia counties.

**Know Your Watershed Campaign** – Hundreds of Know Your Watershed educational posters were distributed this year to educators and natural resource professionals. The poster is a tool for teaching the importance of watersheds to New Mexico citizens and ways they can help care for them. An enhanced electronic version with links to additional online resources is accessible via the website: [www.allaboutwatersheds.org](http://www.allaboutwatersheds.org).

**All About Watersheds Web Portal** – Beyond its function as an information clearinghouse, the portal is used by interagency and non-governmental groups involved in local and regional efforts to improve the state's natural resources. Users take advantage of its virtual workspace to reduce costs the state would otherwise incur for face-to-face meetings; regional collaborative groups, like the Rio Grande Clean Water Partnership, employ it to conduct key elements of their work.

**URBAN AND COMMUNITY FORESTRY PROGRAM:** Forestry's Urban and Community Forestry Program works to empower New Mexico communities to recognize and maximize the benefits from their community forests through technical assistance and support with identifying funding sources.

The Urban and Community Forestry Program has seen an overall increase across the state in the number of volunteers, citizens, and communities managing or developing programs to plant, protect and maintain their urban and community trees and forests. Six communities have received Community Forestry Assistance Grants to develop and strengthen urban forestry programs. Four communities received Centennial New Mexico Forest Re-Leaf tree planting grants. Fifty-four communities have active local advocacy/advisory organizations, such as active tree boards, commissions, or non-profit organizations that are formalized or chartered to advise and/or advocate for the planting, protection, and maintenance of urban and community trees and forests. 5,167 volunteer hours have been logged across the state related to Urban and Community Forestry and tree planting.

**FIRE MANAGEMENT:** 2011 was one of the most active fire seasons on record across New Mexico and the southwestern United States. During fiscal year 2011, 854 fires burned approximately 596,857 acres of state and private land. The number of fires exceeds 1,000 and the number of acres exceeds 600,000, when other lands for which Forestry shares protection responsibility are included.

The two largest fires in New Mexico's recorded history occurred in 2011. The Las Conchas Fire burned 156,593 acres across private, state and federal lands in and around the Santa Fe National Forest. The Donaldson Fire burned 101,562 acres on private land in southeastern New Mexico. Forestry reports that 696 fires were human-caused with equipment use as a leading contributor. Some of the largest fires were caused by engine exhaust, blown vehicle tires, hot brakes, engine particles and power tools. Dry, windy weather and heavy fuel conditions were also

major contributing factors to the number and severity of fires reported. Forestry continues to work collaboratively with local, state, federal and tribal fire agencies to educate New Mexicans about fire prevention and preparedness. Wildland fire incidents are reflected by the location map in the Data and Statistics section of this report on page 21.

Wildland fire training was provided for 3,777 volunteer municipal, state, federal and tribal firefighters, and Forestry taught wildland fire investigation-related courses to fire and law enforcement investigators. There were also 26 wildfire incidents investigated. Six wildfire investigations resulted in law enforcement action including arrests and written warnings.

**RESOURCE REHABILITATION AND PROTECTION:** Forestry works with private landowners, state, and federal agencies to protect land from future development that could fragment the landscape. Through various incentive programs, landowners can place large tracts of land into conservation easements that allow them to retain ownership while protecting it.

Sixty-four new or revised forest stewardship and treatment plans were prepared in 2011 for a total of 26,967 acres on private forested land in New Mexico. In addition to this, 108 landowners received technical assistance on their private forest lands, with an additional 928 landowners participating in educational programs related to forest stewardship, fire prevention and forest management.

**Conservation Seedling Program** distributed 109,699 seedlings through sales during the New Mexico State Fair, New Mexico Agriculture Expo and educational donations.



Photo by: Robert Brown

Flames from the T.O. Ranch Fire near Raton.

Forestry received and processed seven Assessment Applications for the Land Conservation Incentive Act Tax Credit Program; six applications were approved and one is pending approval by the Natural Lands Protection Committee to move on to the application certification phase. Currently, three applications are with the New Mexico Department of Taxation and Revenue's Property Appraisal Review Division awaiting final certification for a tax credit. To date, eight previous applications were approved during 2011 and certification letters were issued to those applicants awarding more than \$2.13 million in tax credits on a total appraised land value of over \$4.33 million for 3,883 acres.

**INMATE WORK CAMP PROGRAM:** Forestry's Inmate Work Camp Program was established in 1997 for the purpose of conducting forest health/urban interface projects on public land in New Mexico. The crews are also trained to conduct wildfire suppression activities and function as an efficient, cost effective resource for New Mexico.

In cooperation with the New Mexico Corrections Department, the inmate crews consist of 10-12 minimum security inmates and each crew is transported to project areas and supervised by one Forestry Division Crew Supervisor. The current program has the ability to field six crews per workday throughout the year and is based in Los Lunas at the state's minimum security prison facility. This year the program provided crews from the Los Lunas Inmate Work Camp to work on 10 projects for 10 different local, state, federal and private co-operators, performing 1,190 man-days of work and 13,000 man-hours of work. Crews were assigned to 36 wildfires, performing 256 crew-days of work.



## Data and Statistics

### 2011 SEEDLING CHART:

Forestry's Conservation Seedling Program continued to provide landowners the ability to take advantage of fall and spring planting seasons with two distribution periods. With the combined distribution periods, 109,140 tree seedlings were distributed through the program sale, annual sales at the New Mexico State Fair and educational donations.

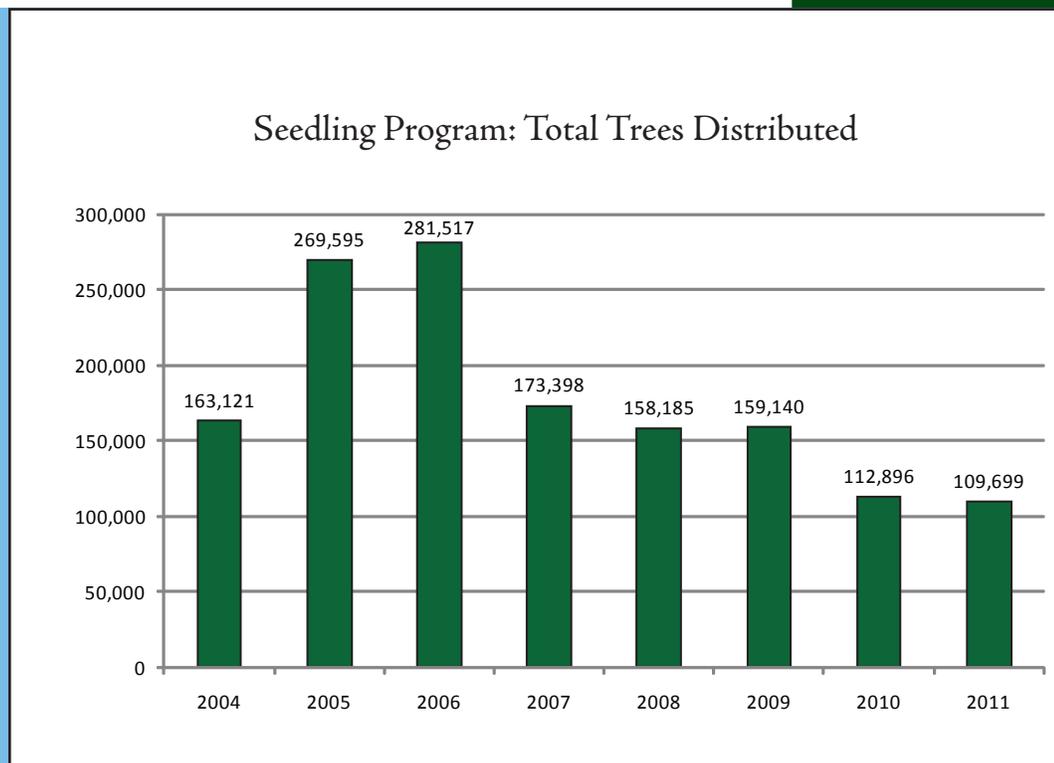
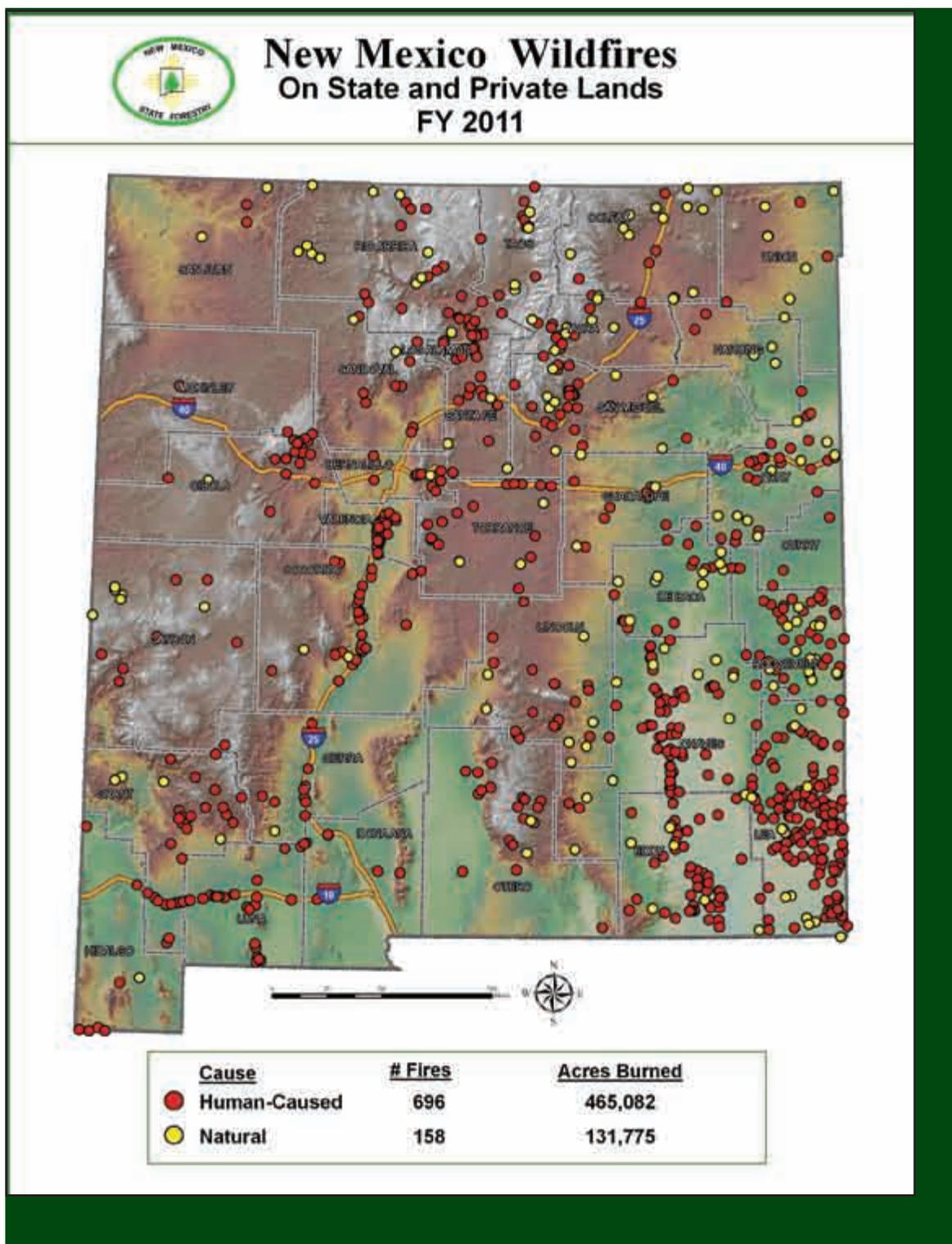


Figure 1

**2011 FIRE MAP:** Fire season 2011 saw more acres burn across New Mexico than any year in recent history. During fiscal year 2011, 854 fires were reported on state and private land. These fires burned 596,857 acres. Total number of acres burned including federal land totaled 967,438.



**2011 RE-LEAF GRANTS:** Forestry's New Mexico Forest Re-Leaf Program awarded \$21,123 in grant funding to the communities of Bloomfield, Mountainair and Santa Fe, as well as the Caballo Soil and Water Conservation District. The program aids communities by providing funds for tree planting for conservation purposes, educational outreach, windbreak establishment and general beautification. Re-Leaf grants are funded completely through donations from corporate and private donors. Since 1990, more than \$549,000 has been distributed to New Mexico communities for tree planting. Since 2007, \$146,851.50 has been awarded to communities statewide.

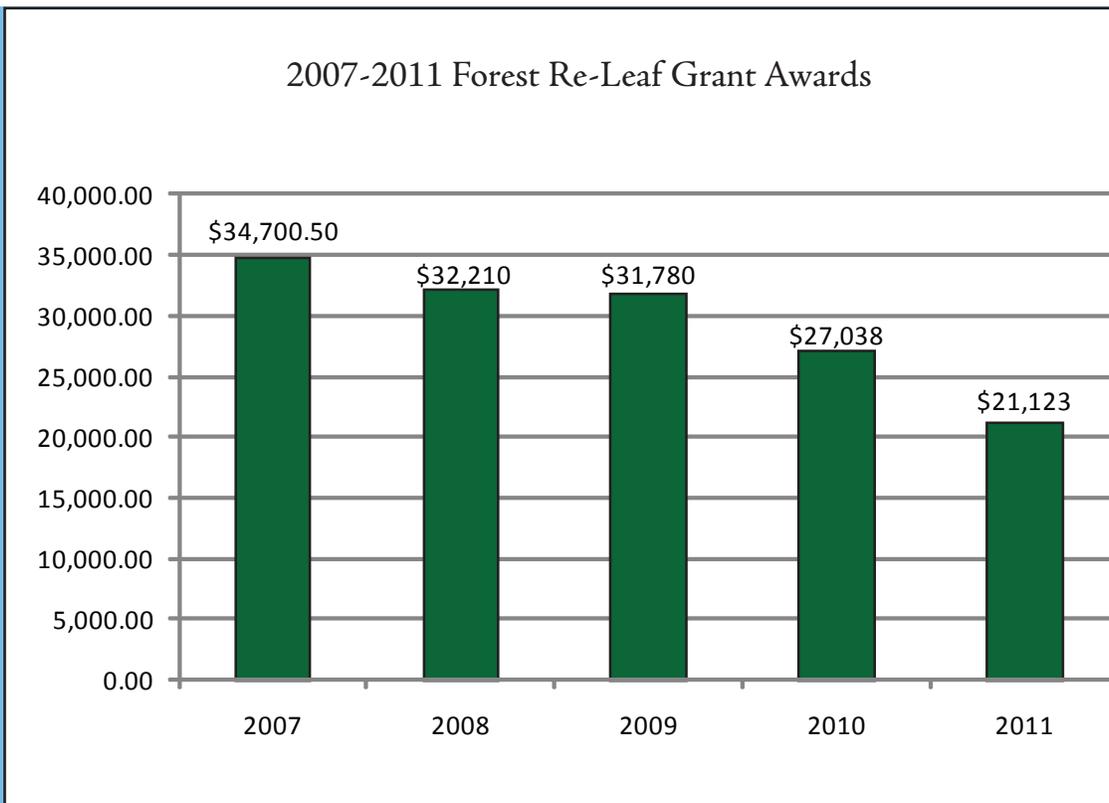


Figure 2



**Mining  
and  
Minerals  
Division**



## Mining and Minerals Division

**MISSION:** The Mining and Minerals Division (MMD) seeks to promote the public trust by ensuring the responsible utilization, conservation, reclamation and safeguarding of land and resources affected by mining. MMD strives to make New Mexico a leader in responsible mine operation and reclamation.

## PROGRAMS AND ACCOMPLISHMENTS

**MINE REGISTRATION, REPORTING AND SAFEGUARDING PROGRAM:** In these increasingly uncertain economic times, decision-makers throughout New Mexico benefit from the valuable information compiled and disseminated through this program. Comprehensive information is provided on mineral resources, mine registration, reclamation and safeguarding efforts, legislation, and other MMD activities related to New Mexico's mineral extraction industry and mineral resources.

As part of its safeguarding activities, MMD collaborates with state, federal and tribal agencies to survey, prioritize, and clean up abandoned uranium sites. The New Mexico Legacy Uranium Mine (LUM) Inventory Project ascertains the extent and magnitude of the occurrence of abandoned uranium mines in New Mexico, especially those mines that have not been addressed previously by a state, federal or tribal entity. MMD's Mine Registration Program is very proud of its efforts to locate and assess legacy uranium mines, conducting preliminary site assessment and field survey work at 55 mines, including those in the Grants Mineral Belt. In most cases these are small mines mentioned in historical literature; the biggest challenge was locating them. Each assessment included site mapping and identification of important features; photographic documentation of all aspects of the site; radiological survey; plant community description; general soil condition description; wildlife sighted or evidence of wildlife in the area; land use including current apparent land use; off-site impacts including any readily apparent potential or occurring off-site impacts; topographic features including roads and water courses; and any hydro-geologic data that exists about the site. This LUM Inventory Project was the most recent in a series of MMD efforts that began in the late 1980s when MMD's AML Program closed legacy uranium mines in the Grants Mineral Belt.

Public outreach is an important component of this program and the other MMD programs. Many times, concerned citizens or even mine operators may not be sure of what is required of a mining operation or what operations are active near them. To solve this, outreach to the public and mine operators has been expanded. More information is now available on MMD's webpages regarding abandoned mine safeguarding projects and current and proposed mining operations; it is now even possible to track projects by status or county and to download project documents. An electronic newsletter, "MMD Notes," is published to inform the public and industry about events involving MMD and mining activities in the state.

**ABANDONED MINE LAND (AML) PROGRAM:** Works to identify dangerous abandoned mine areas across the state and to abate their hazards. MMD estimates that more than 10,000 hazardous mine openings remain un-reclaimed throughout New Mexico.

The AML Program completed eight construction projects at abandoned mine sites in New Mexico, safeguarding 94 dangerous openings and reclaimed three coal mine waste piles at a total cost of \$1.6 million. Four of these projects benefitted hard rock sites, where 89 dangerous mine openings were safeguarded; of those, 41 features were structural closures. One project, using funds granted by the U.S. Forest Service to AML, stabilized an historic log cabin above a previously safeguarded shaft. Continuing AML's commitment to bat habitat preservation in underground abandoned mines, 34 of the closures at hard rock sites were bat-compatible. At the four coal projects, five openings were safeguarded and three gob (mine waste) piles totaling nine acres were reclaimed, including very steep gob slopes reclaimed in-place in Sugarite Canyon State Park.



Photo by: Mike Tompson

**COAL MINE RECLAMATION PROGRAM:** Is responsible for regulating coal mines on all federal, state and private lands within New Mexico, with the exception of Indian lands. The program oversees 86,000 acres of permitted mine lands and nearly \$300 million in financial assurance.

Program staff completed a two-year project to scan and save all its historic and current information as portable document files (PDFs) or Joint Photographic Experts Group files (JPEGs). By putting the files into these formats, the information is readily searchable. Old maps can be geo-referenced, and their data can be incorporated into geographic information system (GIS) maps. Program staff can access and provide information to the public on more than 40 years of coal mining activity in New Mexico in a matter of minutes.

Bat cupola constructed as part of the Cerrillos Hills Bonanza Creek Ranch project.

## MINING ACT RECLAMATION PROGRAM

**(MARP):** Oversees the reclamation of all exploration and extraction activities conducted at all mines and mills, excluding coal, potash and aggregate mines. MARP encompasses nearly 400 mining and exploration projects and over \$550 million in financial assurance.

One of MARP's mine operators was awarded The Excellence in Reclamation Award for work performed in 2010. As part of an ongoing program to, in part, support and recognize the advancement of mine reclamation science through studies or applying state-of-the-art, innovative reclamation techniques, the 16th Annual Excellence in Reclamation Award was presented to Larry Coons, P.E., for his reclamation work at the Velarde Mill mica mill site in Rio Arriba County. The reclamation occurred on the eastern half of the facility and included three ponds and the tailings stockpile. Mr. Coons received the award for outstanding and innovative reclamation techniques to develop stable, positive-draining landforms; and for outstanding construction in the safeguarding of an historic mining area.

From the early 1980s, the Velarde Mill processed mica ore from the US Hill Mine in the Sangre de Cristo Mountains within the Picuris Pueblo Grant; in 2005, activities commenced to close the site. MMD requirements were met, as well as those of New Mexico Environment Department's Ground Water Quality Bureau and the Office of the State Engineer, to successfully close the mill.



Photo by: Steve Lucero

Velarde Mill site, Rio Arriba County, in 2002 prior to reclamation.



Photo by: Larry Coons



Photo by: Joe Vinson

Reclamation grading work in progress at Velarde Mill site; and the resultant reclamation vegetation at Velarde Mill site in 2011.



## Data and Statistics

### MINERAL RESOURCES: EMPLOYMENT, PRODUCTION AND VALUE: UPDATED TO INCLUDE NEW COAL STATISTICS (APRIL 2012)

Nearly \$1.8 billion worth of minerals was extracted from New Mexico mines in 2010, a 1.3 percent increase from 2009 levels (Table 1 and Figure 1).

New Mexico Summary of Commodity Production, Production Value, Employment, Payroll, Revenue and Ranking - 2010									
Mineral	Production <sup>1</sup>	Production Rank <sup>2</sup>	Production Value \$	Employment <sup>3</sup>	Reclamation Employment	Payroll \$ <sup>4</sup>	Revenue Generated \$ <sup>5</sup>		
							State	Federal	
Coal	21,836,926	13	\$ 667,325,057	1,583	326	\$ 96,636,653	\$ 30,693,943	\$ 3,423,839	
Copper	116,822,927	4	\$ 400,190,809	1,067	91	\$ 38,545,794	\$ 3,299,061	\$ -	
Gold	-	-	\$ -	0	0	\$ -	\$ 11,195	\$ -	
Industrial Minerals <sup>6</sup>	2,343,734	-	\$ 110,718,970	484	13	\$ 16,571,353	\$ 876,766	\$ 96,795	
Aggregates <sup>7</sup>	10,752,950	-	\$ 81,697,488	911	109	\$ 16,950,264	\$ 1,884,479	\$ -	
Other Metals	21,177	-	\$ 337,560	21	4	\$ 1,049,663	\$ -	\$ -	
Molybdenum	529,151	-	\$ 7,540,402	208	8	\$ 11,643,000	\$ -	\$ -	
Potash <sup>8</sup>	812,756	1	\$ 512,426,376	1,327	29	\$ 86,469,252	\$ 4,435,814	\$ 9,865,237	
Silver <sup>9</sup>	-	-	\$ -	0	0	\$ -	\$ 14,691	\$ -	
Uranium <sup>10</sup>	-	-	\$ -	57	47	\$ 3,498,775	\$ 75,563	\$ -	
<b>TOTAL</b>			<b>\$ 1,780,236,662</b>	<b>5,658</b>	<b>627</b>	<b>\$ 271,364,754</b>	<b>\$ 41,291,512</b>	<b>\$13,385,871</b>	

Source: Mining and Minerals Division, unless otherwise noted.

<sup>1</sup> Production is in short tons for coal, industrial minerals, aggregates, other metals and potash; copper and molybdenum in pounds.

<sup>2</sup> Production rank is based on 2010 production value in relation to other U.S. states. Molybdenum ranking unavailable.

Sources: *Metals, potash, industrial minerals and aggregates: Mineral Resources Program, United States Geological Survey (minerals.er.usgs.gov)*  
*Coal: Energy Information Administration, United States Department of Energy (www.eia.doe.gov)*

<sup>3</sup> Employment category includes direct and contract employees.

<sup>4</sup> Payroll is for direct employees and does not include contract employees. Payroll does not include benefits.

<sup>5</sup> State revenue includes state trust land mineral lease royalties, rentals and bonuses; and severance, resource excise and conservation tax revenues.  
 Federal revenue includes 50% state share of federal royalties.

Sources: *State data: New Mexico Taxation and Revenue Department (www.state.nm.us/tax), New Mexico State Land Office (www.nmstatelands.org)*  
*Federal data: Bureau of Ocean Energy Management, Regulation and Enforcement (www.boemre.gov)*

<sup>6</sup> Category includes brick clay, calcite, dimension stone, gypsum, humate, perlite, Portland cement, pumice, salt, silica, and zeolite.

<sup>7</sup> Category includes base course, caliche, clay and shale, crushed rock, flagstone, fill dirt, gravel, limestone, red dog, rip-rap, sand, scoria and topsoil.

<sup>8</sup> Potash production is K<sub>2</sub>O mill production.

<sup>9</sup> No silver, gold or molybdenum co-production was reported for calendar year 2010.

<sup>10</sup> Employment/payroll numbers are for licensing/permitting at proposed uranium mines, and reclamation activities/maintenance at closed mines and mills.

Table 1

New Mexico remains a leading United States mineral producer with 2010 rankings of first in potash, perlite and zeolite; fourth in copper; and thirteenth in coal, as reported by the U.S. Geological Survey (USGS) and the U.S. Energy Information Administration. The principal minerals, in descending order of 2010 production value, were coal, potash, and copper. According to USGS, New Mexico ranked twentieth in 2010 when ranking states by the production value of non-energy minerals, producing 1.6 percent of the production value of total U.S. non-energy minerals.

Coal claimed the top spots for production value and payroll in 2010; also, the coal industry generated the greatest revenue for the state (Table 1 and Figure 2). Total 2010 revenues (state and federal) generated by mineral production in New Mexico declined 23 percent to \$54.7 million from 2009's all-time high of \$70.9 million (Figure 1).

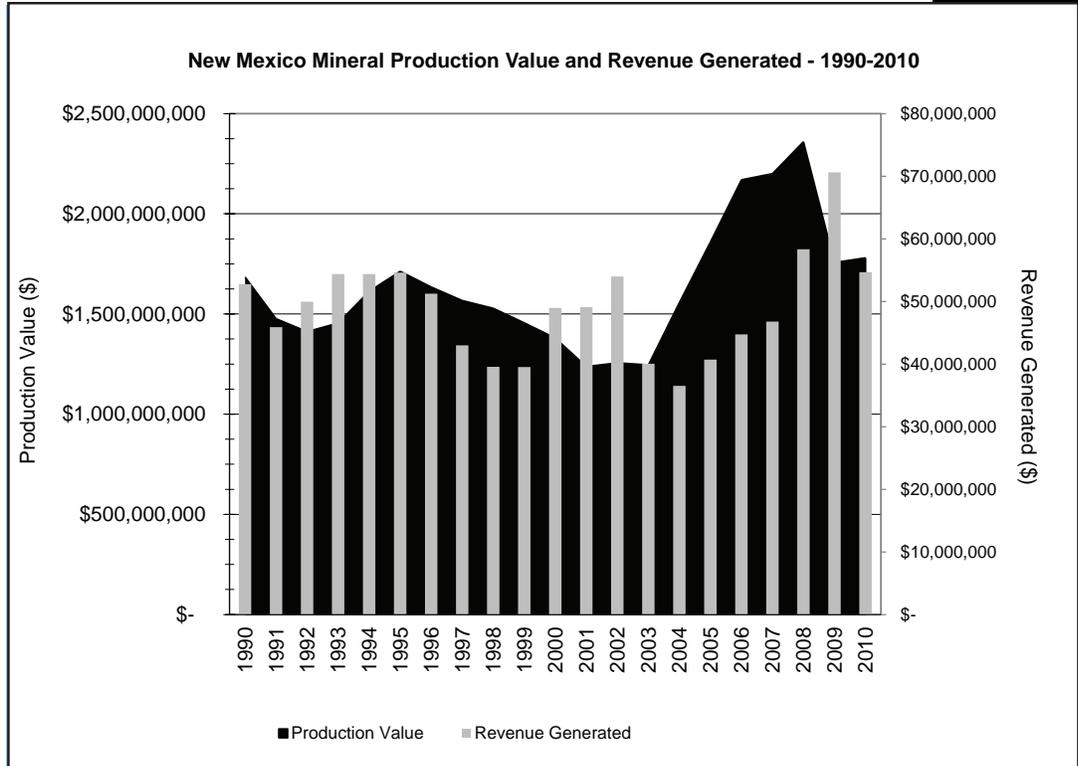


Figure 1

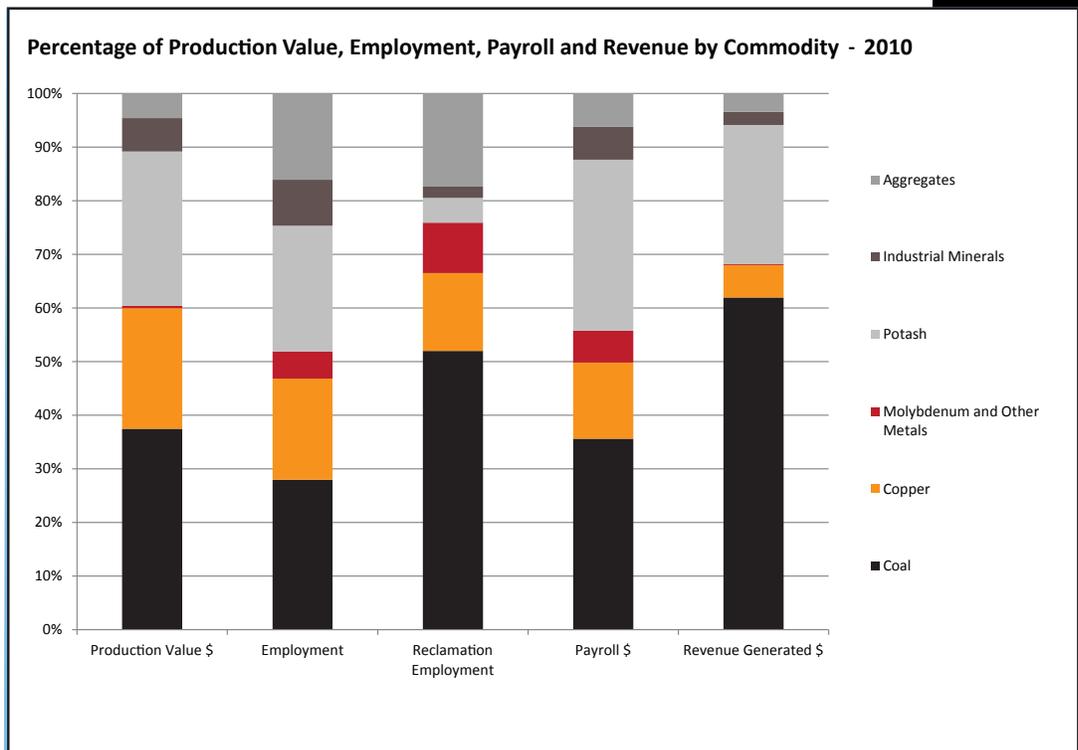


Figure 2

Total mining sector employment increased while payroll amounts slightly decreased in 2010. The total number of direct and contract employees in the mining industry in 2010 was 5,658, a nearly 10 percent increase from 2009. Industry payroll exceeded \$271 million, down 5.5 percent from 2009 (Figure 3). Direct employment increased six percent to 4,742 employees; contract employment increased 33 percent to 916 workers; and reclamation employment increased 59 percent to 627 workers (Figure 4). Coal was the largest employer in New Mexico's mining industry, followed by potash and copper.

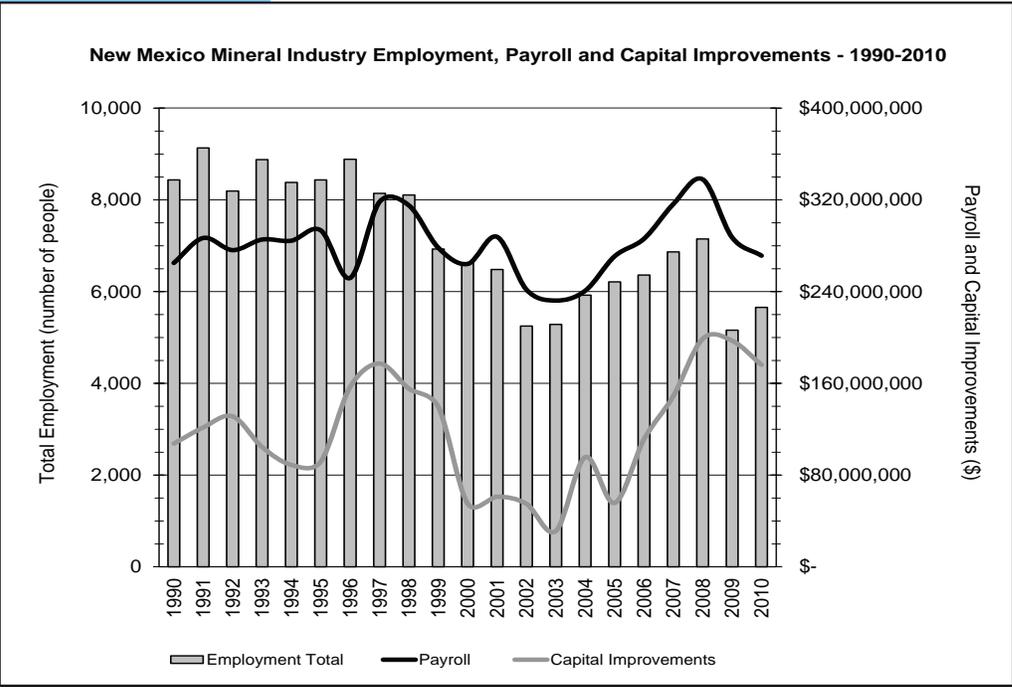


Figure 3

Capital improvement expenditures declined 11 percent from 2009 to 2010. New Mexico mining companies invested \$176.2 million in capital improvements and equipment in 2010, down from \$197.2 million in 2009 (Figure 3).

There were 217 registered active mining operations in New Mexico in 2010. These operations included five coal mines; three potash mines, five potash refineries and one potash compaction plant; one molybdenum mine and one molybdenum mill; two copper mines and two solvent extraction/electro-winning (SX/EW) plants; 25 industrial mineral mines and 13 industrial mineral mills; and 159 stone and aggregate operations (Figure 5).

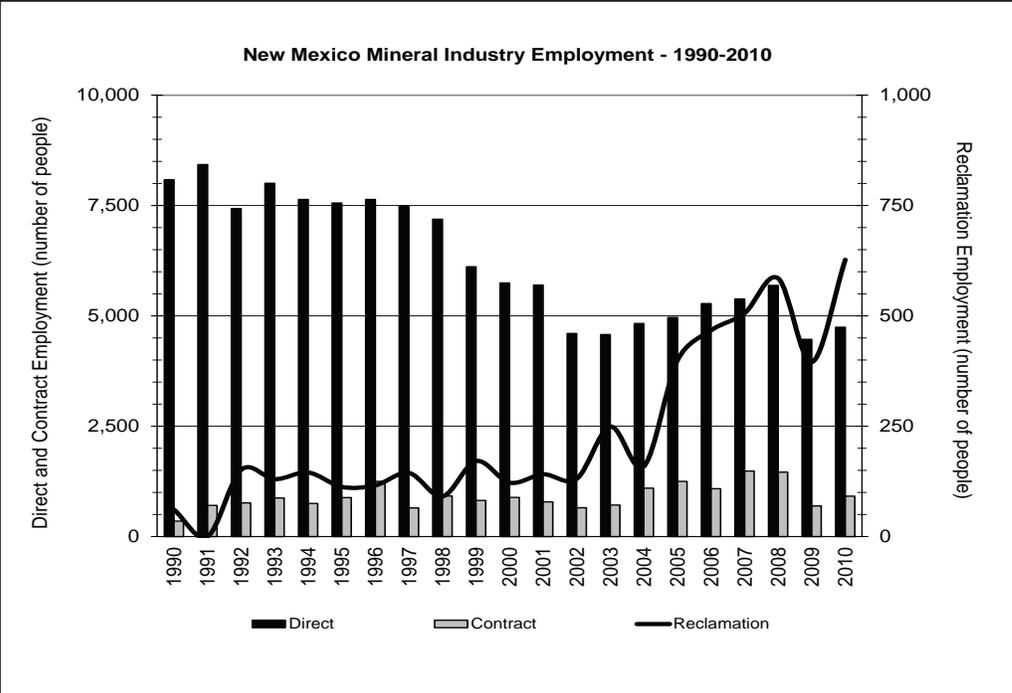


Figure 4

Figures 6 through 9 provide graphic representation of 20-year production amounts and dollar values for coal, copper, potash, and aggregate (flagstone, construction sand and gravel, crushed rock, and scoria), respectively.

# Active Mines in New Mexico in 2010

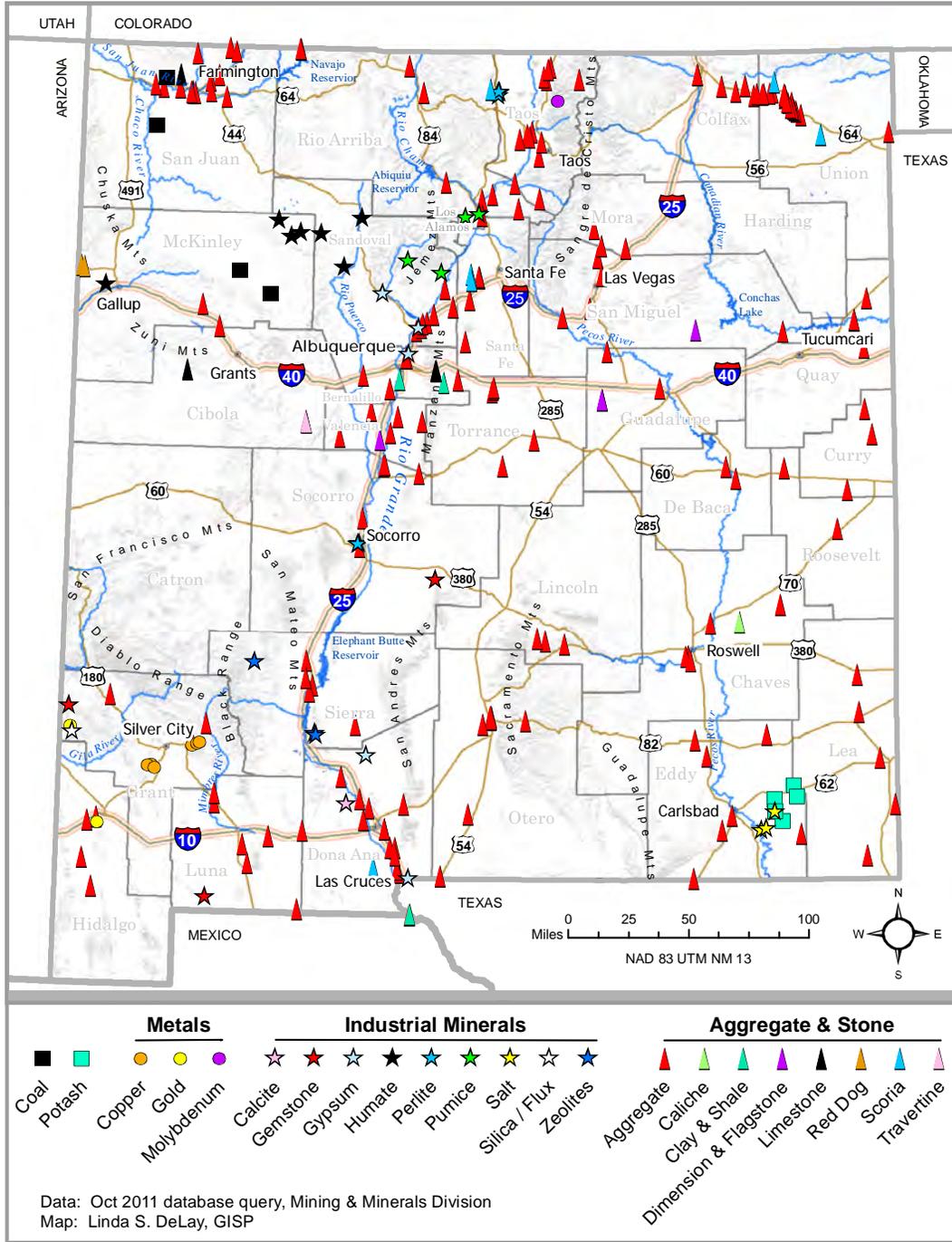


Figure 5

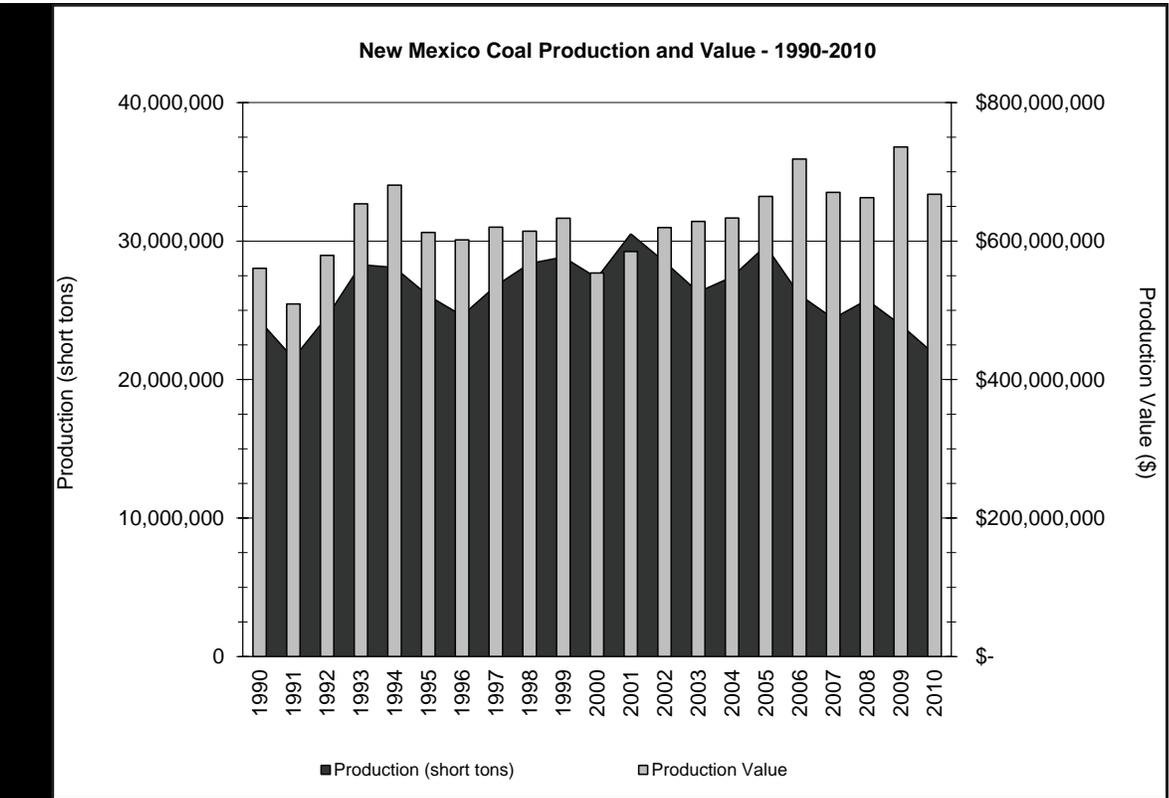


Figure 6

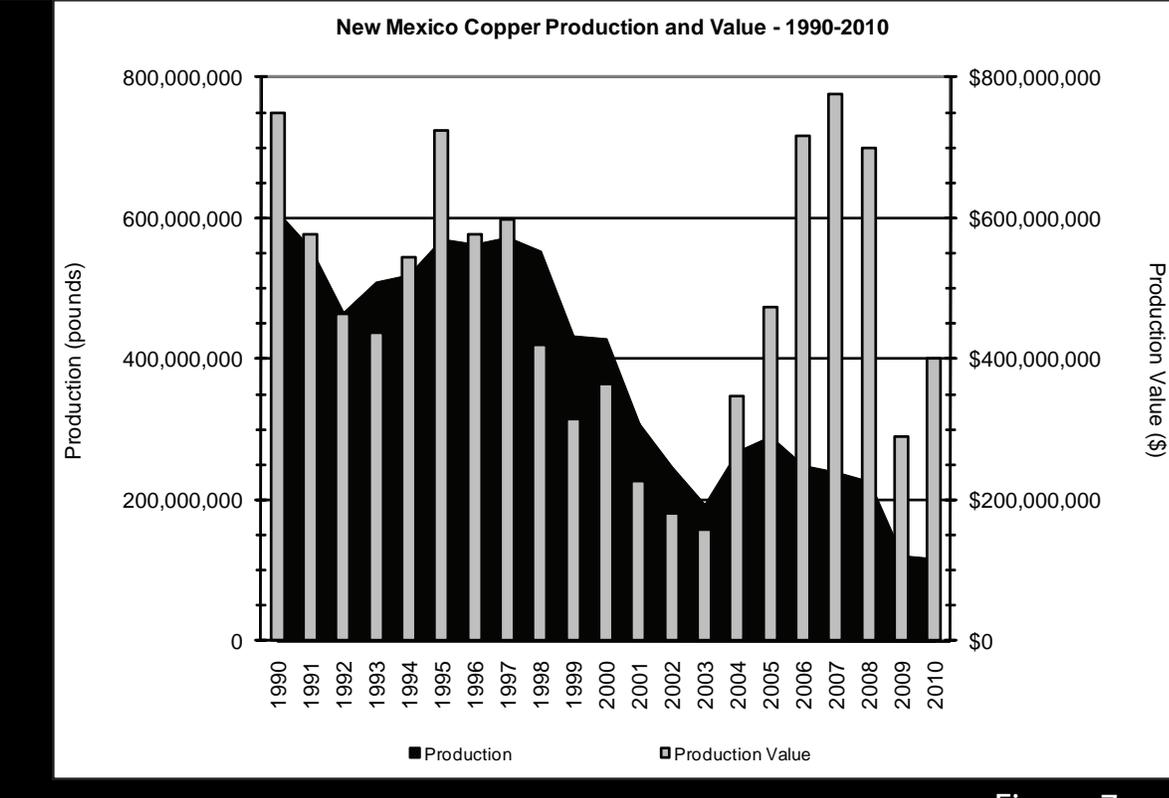


Figure 7

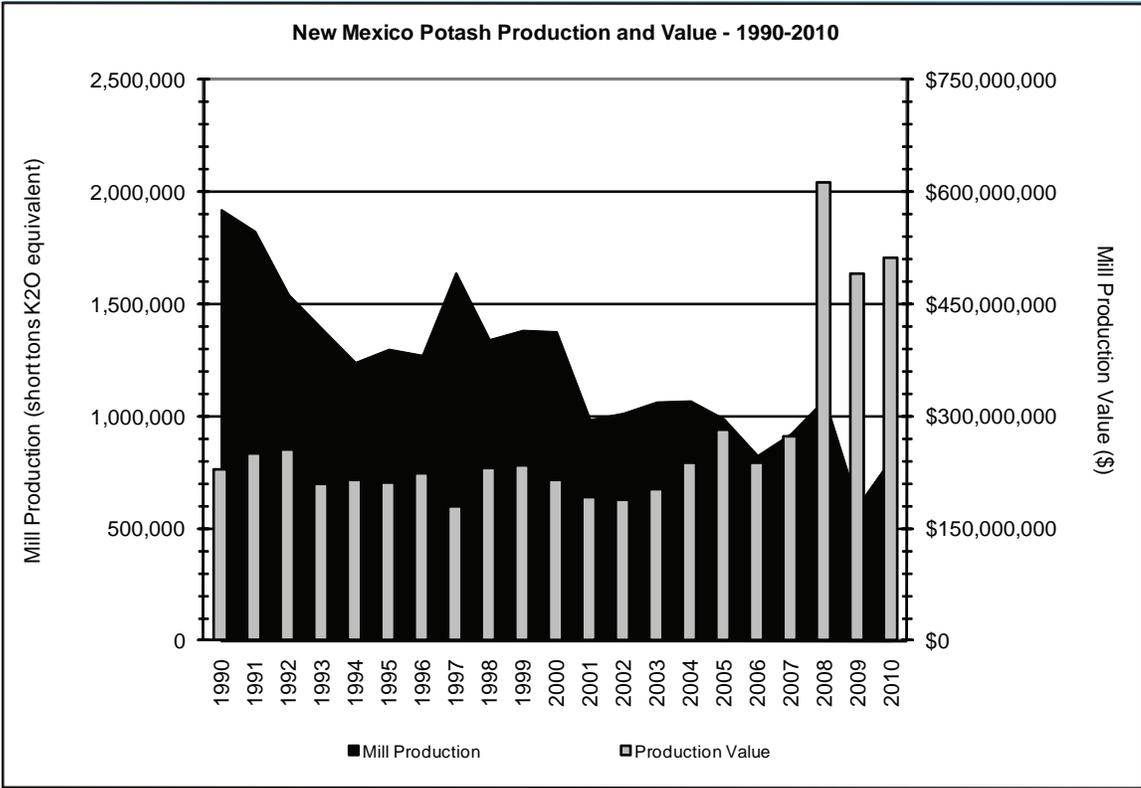


Figure 8

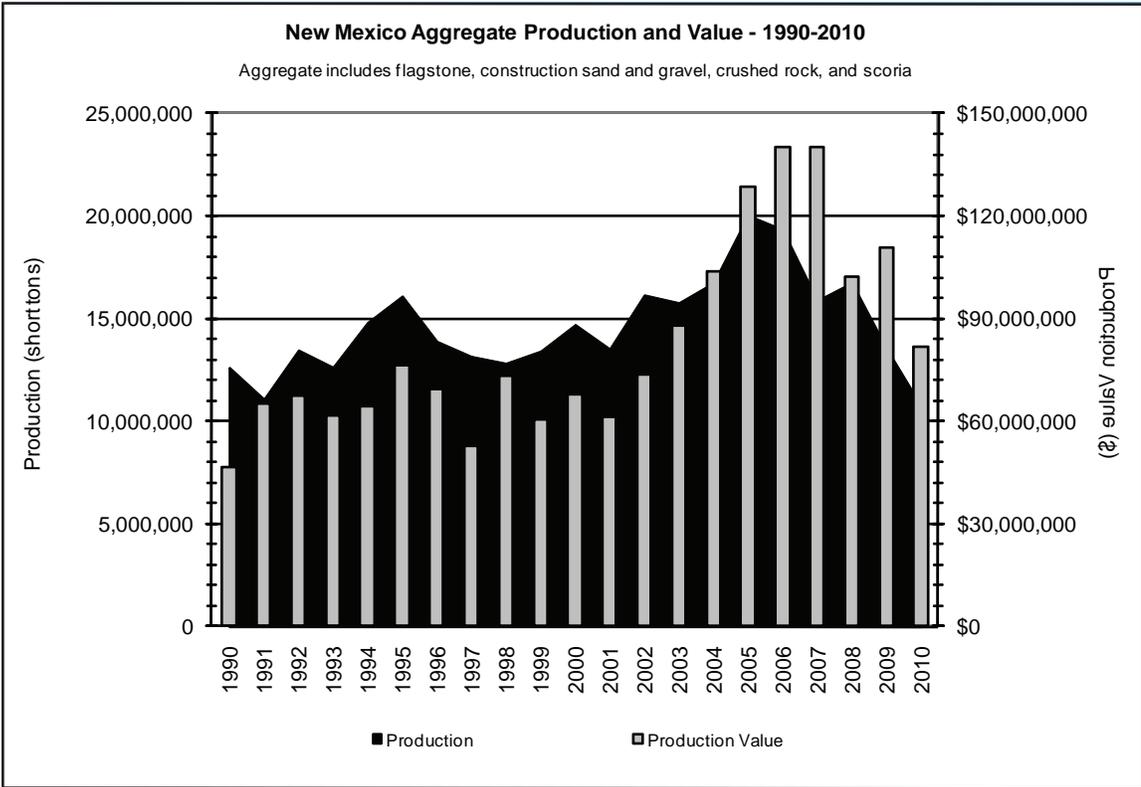


Figure 9



# **Oil Conservation Division**



## Oil Conservation Division

**MISSION:** The Oil Conservation Division (OCD) administers laws and regulations relating to the oil, gas and geothermal industry of New Mexico. The Oil and Gas Act, the Water Quality Act and the Geothermal Resources Conservation Act authorize the division to enforce primary statutory mandates.

**OVERVIEW:** OCD is organized into four district offices and five bureaus responsible for different aspects of regulating the oil and gas industry. The district offices issue drilling permits, inspect wells and associated facilities, respond to spills, investigate violations and institute enforcement actions.

The Engineering Bureau processes administrative applications for exceptions to OCD rules and the staff serves as division-appointed hearing examiners for OCD hearings. The Environmental Bureau develops and enforces environmental regulations and programs in the oil and gas industry for the protection of New Mexico's environment. The Legal Bureau provides legal advice and support, works with well operators to implement and manage Agreed Compliance Orders (ACOs) and participates in the formulation of OCD rules and proposed legislation. The Fiscal Bureau is responsible for collecting and dispersing monthly well production and injection data, information about wells, completions, spacing, pools, operators, inactive wells and orphan wells. It also manages data systems including OCD Online Electronic Permitting and the OCD website. This bureau also tracks statistics and oversees the division's budget and procurement needs. The Administrative and Records Bureau provides administrative support, manages the plugging bond program, manages the hearing process and maintains records of cases and orders. It also manages and maintains OCD's Online Imaging database. The Oil Conservation Commission is a three-member commission that makes rules governing oil and gas production in New Mexico.

OCD works with representatives from diverse groups to consistently enforce its regulations and identify areas where regulations can be improved. OCD is actively involved in nationwide federal, state and industry organizations that share information on new technologies and discuss best practices and success stories in areas such as web-based deliverables, beneficial uses of produced water and the protection of ground water.

## Accomplishments

**PERFORMANCE:** Despite constraints on division resources, OCD succeeded in providing efficient and effective industry oversight during a recent 12-month period as evidenced by several measures of output. During the calendar year, OCD processed and issued 479 administrative orders and 247 hearing orders. The average turnaround time on administrative orders (those decisions of a rule compliance nature) was 17 days and the average turnaround time on hearing orders (decisions on contested issues requiring an evidentiary process) was 28 days. OCD permitting staff processed 1,729 applications for permission to drill during the calendar year and performed over 29,000 inspections of oil and gas wells and associated facilities.

**BRINE WELL MANAGEMENT:** Two brine well collapses caused the division to formally evaluate all remaining brine wells in the state. This evaluation identified one brine well in a commercial, transportation and residential area that may be at risk for collapse. OCD continues to work with the owner, the city, contractors and other governmental agencies to manage this risk and to prevent harm to humans and the environment. OCD is currently evaluating a permit for a new brine well in Eddy County. Brine is necessary for oil and gas development.

Old cable tool drilling rig located near Otis, New Mexico.



Photo by: Mark Fesmire

**INACTIVE WELL MANAGEMENT:** OCD created a web application that shows each operator's inactive wells and allows the operator to project future inactive wells. If an operator has a certain number of inactive wells, based on the total number of wells that the operator operates, some activities may or must be denied. A well can be removed from the inactive well list by producing or injecting, being plugged, properly temporarily abandoned or issued an agreed compliance order, which provides a schedule for reduction of the number of inactive wells.

**FINANCIAL ASSURANCE:** The enforcement rules adopted in 2005 formalized the need for additional financial assurance for wells that meet certain criteria for inactivity. These inactive well financial assurances and the blanket plugging bonds are forfeited by the well operator if the well must be plugged by the state due to the operator no longer being financially viable. The amount of the financial assurance is based on the depth and location of the well. Operators can use the OCD website to see when additional financial assurance might be, or already is, required for each well. The division currently manages over \$31 million in inactive well financial assurances.

**PARTNERSHIP WITH NEW MEXICO INSTITUTE OF MINING AND TECHNOLOGY:** New Mexico Tech and OCD continue to partner on a variety of projects that will encourage oil and gas exploration in New Mexico. Tech has been a valued partner to the division for over 15 years by delivering some of the OCD's data to the web.

**ELECTRONIC SYSTEMS LEADERSHIP:** OCD's web-based systems continue to be a critical resource to well operators, other government agencies and the public. The imaging system delivers over eight million pages of permits, orders, maps, tests, charts, diagrams, photographs and supporting information via the web. The electronic permitting system allows well operators to create, validate and submit applications for permits to drill, plats, sundry notices, tax incentives, operator change requests, operator name changes, drilling reports and production reports. The system has boosted OCD's productivity because the majority of information on the permits is now pre-validated, cannot be submitted if incomplete and does not require further keying of information into the division's systems.

In addition to the images, OCD delivers all information about wells; well production and injection; orders; financial assurance; well completions; perforations and violations through easy to use web-based applications updated instantly or daily.



Photo by: Jim Griswold

Monument Gas Plant located in Lea County.

Oil Center scenic historical marker located in Lea County.



Photo by: Jim Griswold

**ONGOING REGULATORY ISSUES:** OCD is currently working on:

A horizontal well rule that will allow the oil and gas industry to more effectively plan and manage horizontal wells so that New Mexico's resources are more efficiently produced and revenues in the form of severance taxes and royalties to the state are maximized;

Revamping the current "Pit Rule" to make it more efficient and streamlined; and

A hydraulic fracturing disclosure rule that will require oil and gas operators to disclose the chemical constituents of the hydraulic fracturing fluid used during well completion operations.

**ONGOING MANAGEMENT INITIATIVES:** Following are a few of OCD's ongoing activities:

Instituted certain management changes to improve customer service and internal processes aimed at making OCD more transparent and responsive to industry and the public;

Organized and conducted meetings with both environmental and industry advisory groups to obtain feedback from each concerning OCD operations;

Revised requirements for the Water Quality Control Commission (WQCC) discharge plans and released many facilities from the obligation of renewal of such plans;

Revised brine well and injection well bond forms to cover reclamation and remediation in addition to simple well plugging;

Established deadlines for processing administrative applications and hearing orders;

Issued guidance to hearing examiners on forced pooling and non-standard spacing units;

Developed a process to allow gas pipeline connection during drilling, completion or recompletion activities to allow operators to connect sooner, to allow royalty owners to collect on all production and to reduce flaring of gas at the wellhead; and

Streamlined the processing of H2S Contingency Plans.

## **GOALS:**

To create management processes that reflect balance, consistent application of regulations, fair treatment of all stakeholders, and transparency in all actions;

To reorganize and update the OCD website so it is more user-friendly and contains current information;

To remove the environmental applications backlog; and

To increase staffing in the district office to enhance application processing and well inspections.



## Data and Statistics

**OVERVIEW:** As of November 2011, there were 26,624 oil wells, 29,713 gas wells, 683 CO<sub>2</sub> wells, 3,783 enhanced recovery injection wells and 801 salt water disposal wells. Between 2003 and 2010, a total of 6,239 wells were plugged and the sites were remediated by either the well operators or through the Oil and Gas Reclamation Fund.

Total New Mexico oil production during 2010, including condensate, was 65.2 million barrels, an increase of over four million barrels over 2009's volume. New Mexico natural gas production during 2010 was 1,312 BCF (billion cubic feet).

### Oil Production by Year

	SE Crude	SE Condensate	NW Crude	NW Condensate	Total Oil
2006	51,576,501	5,246,742	1,006,567	1,626,080	59,455,890
2007	51,815,683	4,853,897	1,001,659	1,525,193	59,196,513
2008	53,400,463	4,208,164	1,000,189	1,545,435	60,154,251
2009	54,653,004	4,003,455	970,188	1,525,218	61,151,865
2010	59,518,738	3,340,343	898,664	1,398,325	65,156,070

Volumes (in barrels) are adjusted to reflect amended production reports  
Source: Oil Conservation Division as of October 31, 2011

*Table 1*

### Natural Gas Production by Year

	SE		NW		Total Natural Gas *	Coalseam Gas
	Casinghead	SE Dry Gas	Casinghead	NW Dry Gas	(Includes NE)	(Included in Total)
2006	223,057,355	319,123,426	12,611,555	1,007,663,193	1,588,854,503	524,959,546
2007	214,275,520	305,838,580	11,784,436	978,300,538	1,536,193,407	507,689,197
2008	201,688,479	293,999,114	11,465,742	939,795,019	1,473,215,950	476,556,124
2009	206,969,193	248,200,791	10,877,847	905,126,182	1,397,298,399	449,700,644
2010	217,596,551	213,713,205	10,341,033	844,314,375	1,312,174,215	407,179,660

Volumes (in thousands of cubic feet) are adjusted to reflect amended production reports filed with OCD  
\*Totals include gas produced in northeast New Mexico, which is not displayed in a separate column  
Source: Oil Conservation Division as of October 31, 2011

*Table 2*

**2010 Oil and Gas Production by County**

Rank	Oil (Barrels)	Rank	Gas (Thousand Cubic Feet, MCF)		
1	Lea	33,065,618	1	San Juan	506,076,022
2	Eddy	27,685,217	2	Rio Arriba	346,873,170
3	Chaves	1,873,493	3	Eddy	219,140,299
4	Rio Arriba	1,124,475	4	Lea	185,411,426
5	San Juan	1,063,465	5	Colfax	26,195,178
6	Roosevelt	234,753	6	Chaves	24,403,432
7	Sandoval	70,012	7	Roosevelt	2,354,599
8	McKinley	39,037	8	Sandoval	1,550,229
			9	McKinley	155,987
			10	Guadalupe	13,873
<b>Total:</b>	<b>65,156,070</b>			<b>1,312,174,215</b>	

Source: Oil Conservation Division as of November 8, 2011

*Table 3*

**Wells Drilled and Completed by Year by Well Type  
First Reported Completion per Well**

	Gas	Oil	Other	Total
2006	1,265	786	79	2,130
2007	1,035	640	49	1,724
2008	856	855	82	1,793
2009	454	720	86	1,260
2010	258	932	89	1,279

Source: Oil Conservation Division as of November 26, 2011

*Table 4*

### Oil and Gas Prices vs. Rig Count

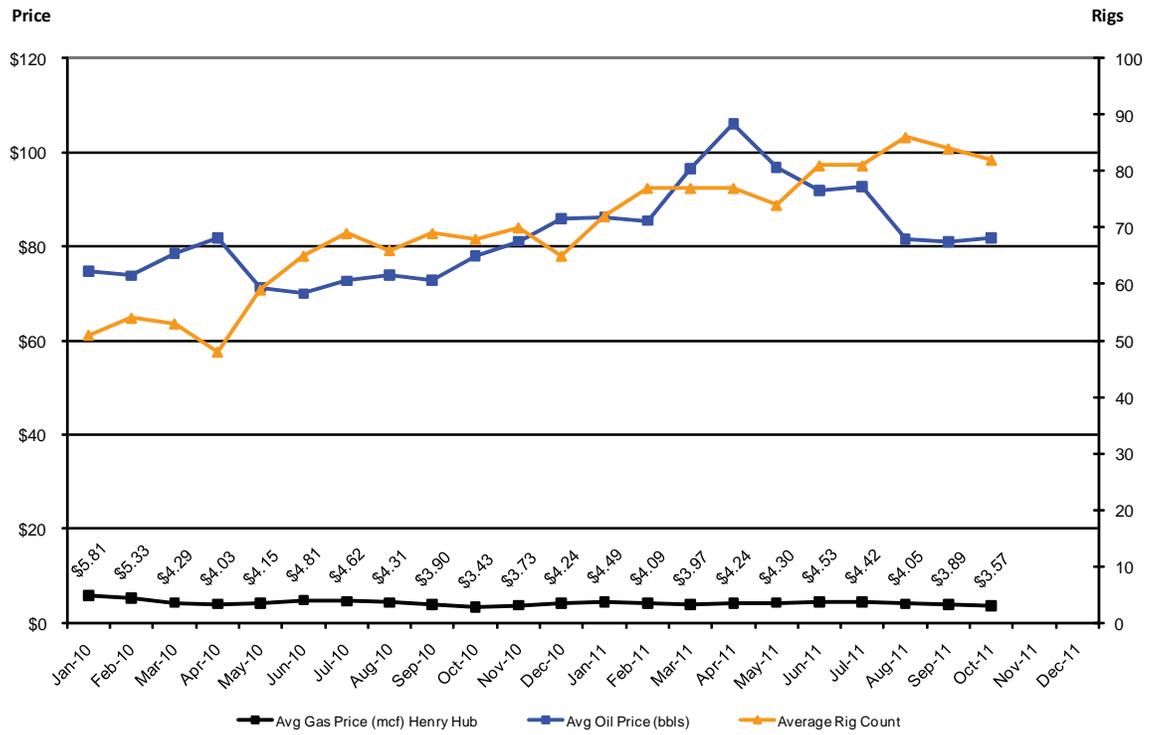


Figure 1

### 2010 Oil Production by Land Type

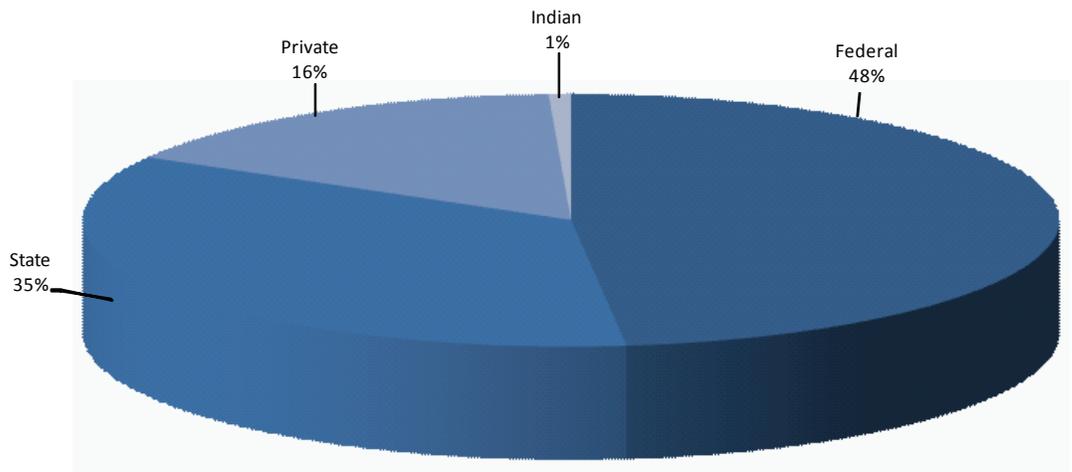


Figure 2

### 2010 Gas Production by Land Type

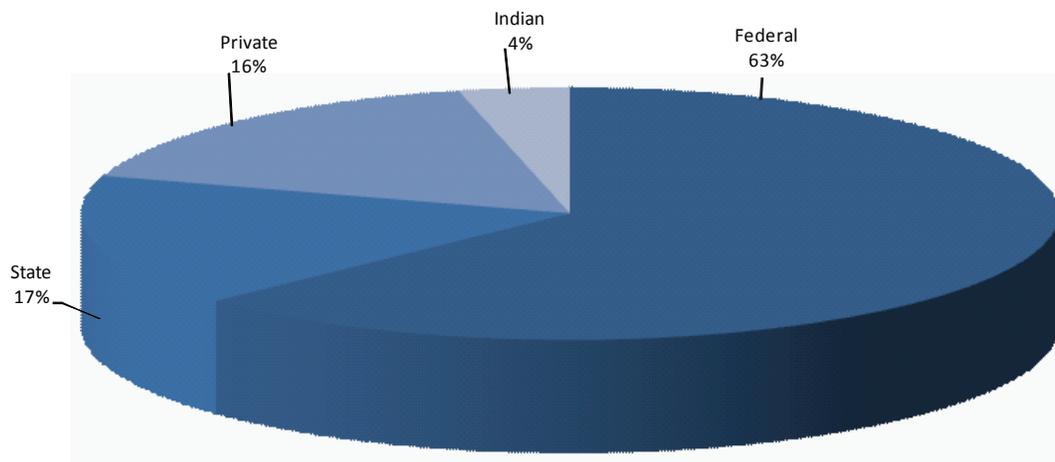


Figure 3

### Number of Inspections of Oil and Gas Wells and Associated Facilities during Fiscal Year 2011

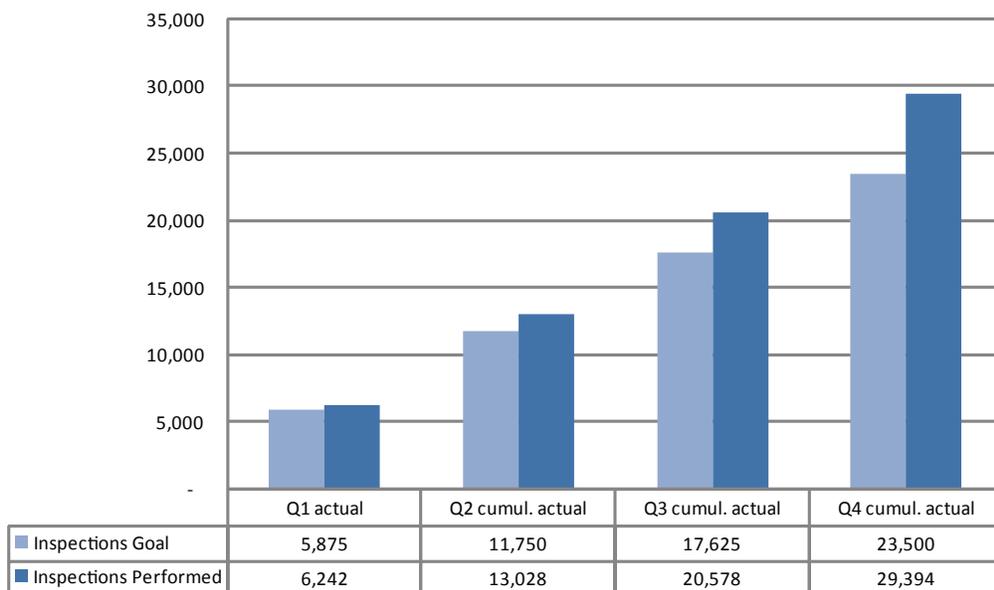


Figure 4



# State Parks Division



## State Parks Division

**OVERVIEW:** The State Parks Division (State Parks) oversees New Mexico's 35 parks that offer a great diversity of natural and cultural resources, providing recreational and educational opportunities for 4.5 million visitors in 2011.

**HISTORY:** State Parks was founded in 1933 in conjunction with the Civilian Conservation Corps efforts during the Great Depression. The State Parks system began with five initial parks and today, there are 35 parks encompassing 19 lakes and 196,677 acres of land and water.

**MISSION:** Protect and enhance natural and cultural resources, provide first-class recreational and education facilities and opportunities, and promote public safety to benefit and enrich the lives of visitors.

State Parks is committed to this mission, employing professional, dedicated staff to ensure that parks are cared for and preserved to the highest professional standards. State Parks programs provide safe, fun and educational experiences - and a visit to a state park is a true value.

State Parks is creatively addressing the challenges of drought, fire, and the overall economy which caused some park seasonal closures, a drop in revenue and staff reductions. For instance, funding from the Bureau of Reclamation made it possible to hire seasonal staff to address Aquatic Invasive Species issues at several lake parks, and 34 seasonal staff positions were funded in the summer and fall of 2011. In order to address issues of revenue generation, staffing support and visitation increases, State Parks is undertaking the development of a comprehensive Strategic Operations and Sustainability Plan.

Visitors to New Mexico's parks continue to express great satisfaction with their experiences. For the past five years, State Parks asked for feedback from park visitors through online surveys and consistently received reports of 98 percent visitor satisfaction.

## Accomplishments

**VISITATION AND REVENUE:** A total of 69 percent of State Parks' budget is supported by self-generated revenue and 31 percent is general fund. Visitation and revenue were impacted in 2011 by drought, wild fires, aquatic invasive species issues, and park closures. Visitation totaled 4,572,200, camping fees totaled \$2,638,745, day use fees totaled \$1,405,119 and concession fees totaled \$342,977.

While overall park revenue is down, revenue in some program areas actually saw an increase due to efficiency and creativity. Day use fees increased by \$18,872 due to better collection methodologies, and park lease fees increased by \$17,949. Taxpayers also directly supported State Parks through Personal Income Tax Check-offs. A total of \$18,497 in revenue was realized in 2011 for the Kids 'n Parks transportation grant program and the Vietnam Veterans Memorial State Park fund.

**LAW ENFORCEMENT AND BOATING SAFETY PROGRAM:** State Parks is dedicated to achieving compliance with parks and recreation management laws. The Law Enforcement Program provides responsive visitor services, resolution of conflicts within park jurisdiction, and promotion of natural and cultural resource protection. State Parks currently employs 76 of 96 park officer positions. These officers partner with local communities, visitors, and other agencies to develop and sustain the diverse environments in our parks while balancing the demand for recreation with best management practices.

South Boat Ramp,  
Eagle Nest Lake  
State Park.



Photo by: New Mexico State Parks Division

State Parks operates and manages the majority of all recreational boating areas in New Mexico. Thus, marine law enforcement efforts ensure safe and memorable experiences for boaters. State Parks also manages the Boat Access Improvements and Maintenance Program to provide boaters with good launching, docking, and parking facilities at all properties operated by the agency.

The Law Enforcement and Boating Safety Program constantly faces new challenges including resource threats, new laws to administer and enforce, new guidelines to follow, or other public safety issues. In order to meet these challenges, park officers receive the most current, professional training and they continually strive to improve cooperation with the public, coworkers and other agencies.

New Mexico's lakes and rivers offer exciting and memorable experiences for visitors seeking recreational boating opportunities. State Parks employs highly trained and equipped officers to patrol state waters and enforce the provisions of the New Mexico Boat Act. These officers also provide educational programs regarding operator and equipment requirements, navigation, and boating hazards. They stress the importance of wearing life jackets and sober boating.

Boating safety classes are available in many locations throughout the state and school-aged children receive boating and water safety presentations. In 2011, 900 classes were presented. Boating safety courses are available via the Internet, marine enforcement officers, and volunteer instructors.

Photo by: New Mexico State Parks Division



The goal for State Parks is zero boating-related injuries and fatalities each year. Unfortunately, boating accidents and fatalities continue to underscore the need for better educated boat operators. Partnerships with local, county, state and federal agencies are critical and the Boating Safety Program receives a great deal of support from the U.S. Coast Guard Auxiliary.

Marine Enforcement Officer at Elephant Butte Lake State Park.

**CAPITAL IMPROVEMENTS:** State Parks strives to improve park infrastructure to offer better visitor facilities and services, streamline park operations, increase revenue and save money. State Parks completed numerous capital projects in 2011 to improve visitor experiences and provide reliable infrastructure.

In 2011, the entry to Elephant Butte Lake State Park was reconfigured. When opened for the season, the new entry successfully accommodated the traffic load during the busiest weekends. Some of the new features include a traffic circle to slow traffic and eliminate a dangerous multi-point intersection, and new pay booths. In addition, Elephant Butte Lake State Park was the pilot location for offering public Wi-Fi to visitors, an added benefit at a minimal expense to the agency.



The Education Building at the Rio Grande Nature Center State Park was completed in 2011. This building provides much needed classroom space for students while keeping the visitor center available to the general public. The education building includes classrooms, offices, bathrooms, meeting space, and storage. Many energy- and water-saving features were also included. The landscaping restored the construction site and provides an eye-catching backdrop for the new building.

At Navajo Lake State Park, an overhaul of the water treatment plant at the Pine area of the park was completed. The water treatment plant replaced the original one and will provide a reliable source of drinking water for park visitors. In addition, State Parks made significant improvements in providing accessible fishing piers in the San Juan River at Navajo Lake State Park.

Education Building at Rio Grande Nature Center State Park.

The entry to the main area of Ute Lake State Park was also reconstructed in 2011 to provide more queuing space for visitors and a pay booth for fee collection. In addition, a new RV dump station was constructed.

State Parks continued to install photovoltaic systems on park facilities statewide. These systems provide power to offset ever-rising electric utility rates and allow State Parks to focus savings on other operational needs. Such systems were installed at Elephant Butte Lake State Park, Ute Lake State Park, the southwest regional office in Doña Ana, and Conchas Lake State Park.

Construction began on the visitor center and maintenance facility at Cerrillos Hills State Park and the visitor center at Cimarron Canyon State Park. The Cerrillos Hills project will be largely complete by the end of 2011 and the Cimarron Canyon project by early 2012.

**EDUCATION PROGRAM:** State Parks is dedicated to providing quality interpretive experiences and, despite budget shortfalls, has maintained a high degree of interpretive and educational programming for visitors. Creative staff provided programs that exceeded performance-based budget measures, and a total of 3,959 programs were delivered to 59,461 attendees. This was completed through the efforts of eight full-time interpreters and other employees who received interpretive training.

Special interpretive events were also very popular, and a total of 13,116 events were held in 2011. An example of strong support for such special events is apparent at the Vietnam Veterans Memorial State Park. The Memorial Day, 4th of July Flag Retirement, and Veterans Day ceremonies are popular and well-attended events attracting state, national, and international attention.

The Statewide Outdoor Classroom Program has also been successful, providing students statewide with curriculum-based outdoor experiences. The program has been heavily funded by taxpayers through the Kids 'n Parks Personal Income Tax Check-off for transportation grants to parks. Since 2007, State Parks has provided 100,000 outdoor classroom experiences for kids statewide, and in fiscal year 2011, various state parks were visited by 730 classes and 15,119 students. Teacher trainings are critical and five training sessions equipped 68 teachers to utilize outdoor classroom curriculum guides.

Evaluating the program and capturing teacher participation was undertaken and, on a 10-point scale, teachers gave the program a 9.4 rating for their overall experience and for meeting goals and objectives. As one teacher who visited Leasburg Dam State Park remarked, "This field trip made what they had been learning in the classroom come to life for them."

Partnerships are critical. For example, State Parks partnered with the Bosque Ecosystems Monitoring Project to undertake natural resources monitoring at Mesilla Valley Bosque State Park. Through this partnership, the Bosque Ecosystems Monitoring Project has paid the salary of an educational intern for the park, bolstering park staffing and augmenting park programs.

Photo by: Darcie Schalip



Photo by: New Mexico State Parks Division



Teacher training at  
Mesilla Valley Bosque  
State Park.

**PARK RESOURCE PROTECTION:** State Parks is charged with preserving the unique cultural and natural resources within the park system. Three staff members ensure that all park projects are in compliance with state and federal resource laws. The staff reviewed 60 park projects in 2011 and at least half of these projects required inventory, research and reporting. Resource staff successfully coordinated with partner and regulatory agencies, which is critical to the compliance process.

In addition to legal compliance, State Parks undertook important natural resource protection projects in 2011. For example, through partnerships with the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service and other agencies, a significant wetland restoration project was completed at Bottomless Lakes State Park. As a result, Bottomless Lakes received the International Wetlands of Global Importance designation from the Ramsar Convention on Wetlands.

Wetland restoration also continued along the lower Rio Grande through multi-agency partnerships at Mesilla Valley Bosque State Park and the Broad Canyon tract west of Leasburg Dam State Park. Stands of salt cedar were removed and replaced with native vegetation. State Parks also partnered with the New Mexico Department of Transportation and the Department of Game and Fish to facilitate a wetland mitigation project at Eagle Nest Lake State Park.

Photo by: New Mexico State Parks Division



Silt fence restoration effort at Sugarite Canyon State Park after the Track Fire.

After the devastating Track Fire at Sugarite Canyon State Park, regional and field staff and many partner agencies were incredibly proactive in fire damage assessment, soil stabilization, erosion control, and reforestation. The response and restoration effort will serve as a model for other state parks.

Cultural resource projects were also noteworthy in 2011. State Parks helps coordinate the New Mexico SiteWatch Program which recruits volunteers to monitor sensitive archaeological sites. State Parks helped coordinate statewide site steward trainings and helped organize the annual SiteWatch conference.

Resource staff has been heavily involved in partnerships. For example, the State Parks archaeologist has been a leader in the multi-agency Galisteo Basin Archaeological Sites Protection Act Working Group. This group has supported and will continue to support educational programs, new exhibits, and Native American consultation at Cerrillos Hills State Park.

**VOLUNTEERS AND FRIENDS:** State Parks has long been supported by an amazing group of outstanding volunteers. From around the state and the nation, volunteers bring life-long skills and talents that enhance visitor experiences each year. Giving freely of their time and talents, volunteers staff visitor centers and campgrounds, assist with maintenance of facilities, provide administrative assistance, conduct educational programs, and help coordinate special events.

Over the past eight years, the number of volunteer hours has more than doubled from 116,000 in 2003 to over 300,000 hours in 2011, equating to 145 full time employees. The value of these hours is worth over \$5 million in labor cost savings.

In addition, State Parks has strong support systems from Friends Groups and other park support groups across the state. These groups provide a wide variety of assistance, contributing funding and services and helping with unmet needs. The number of park support groups statewide has significantly grown from 11 in 2003 to 21 in 2011.

**RECREATIONAL TRAILS PROGRAM:** This federal assistance program is made possible through the U.S. Department of Transportation's Federal Highway Administration. The Recreational Trails Program has provided up to 80 percent of project funds to develop, improve and maintain trails and trail-related facilities.

One staff member has been responsible for this important program, and a statewide advisory board was re-appointed in 2011 to provide advice and support. Although federal funds for this program have been reduced, the Recreational Trails Program awarded recreational grants to four projects from state, federal and non-profit organizations totaling more than \$1 million in 2011. Grants were awarded to: the Continental Divide Trail Alliance to aid in completing the last 200 miles of the Continental Divide National Scenic Trail; the U.S. Forest Service, Mt. Taylor Ranger District to provide signs for approximately 300 miles of off highway vehicle trails in the Cibola National Forest; the New Mexico Department of Game and Fish to purchase two electric motor cycles to monitor and log the off highway vehicle trail opportunities; and State Parks to maintain, rehabilitate and construct trails in 15 state parks.

State Parks staff worked hard to finalize existing trail projects, conducting trail assessments, trail maintenance and re-routes, erosion control, vegetation management, and signage installation. These critical projects included completion of two trails at Heron Lake State Park, the West Lakeshore Trail at Elephant Butte Lake State Park, trails along the north and south banks of the San Juan River at Navajo Lake State Park, the Nature Trail at Ute Lake State Park, and the Leasburg Dam State Park trail project.

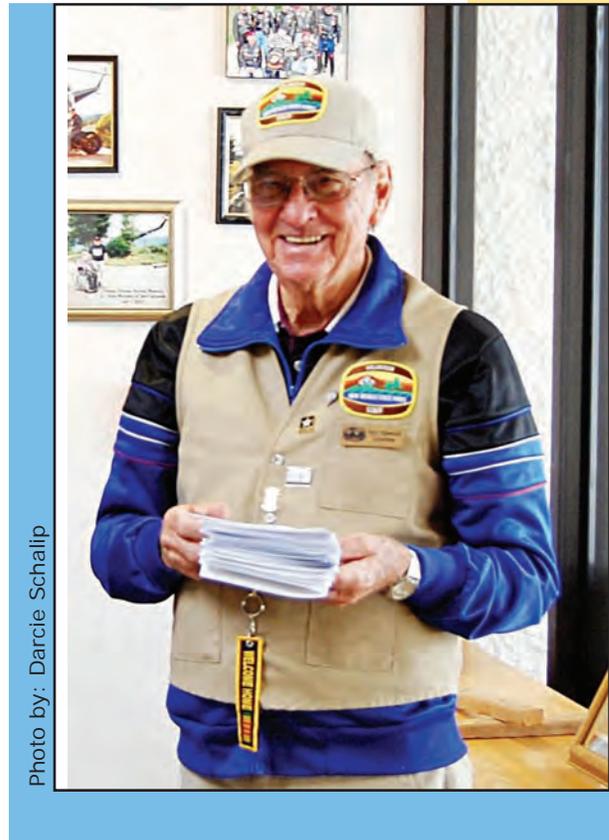


Photo by: Darcie Schallip

Friendly state park volunteer.

Photo by: Judy Kowalski

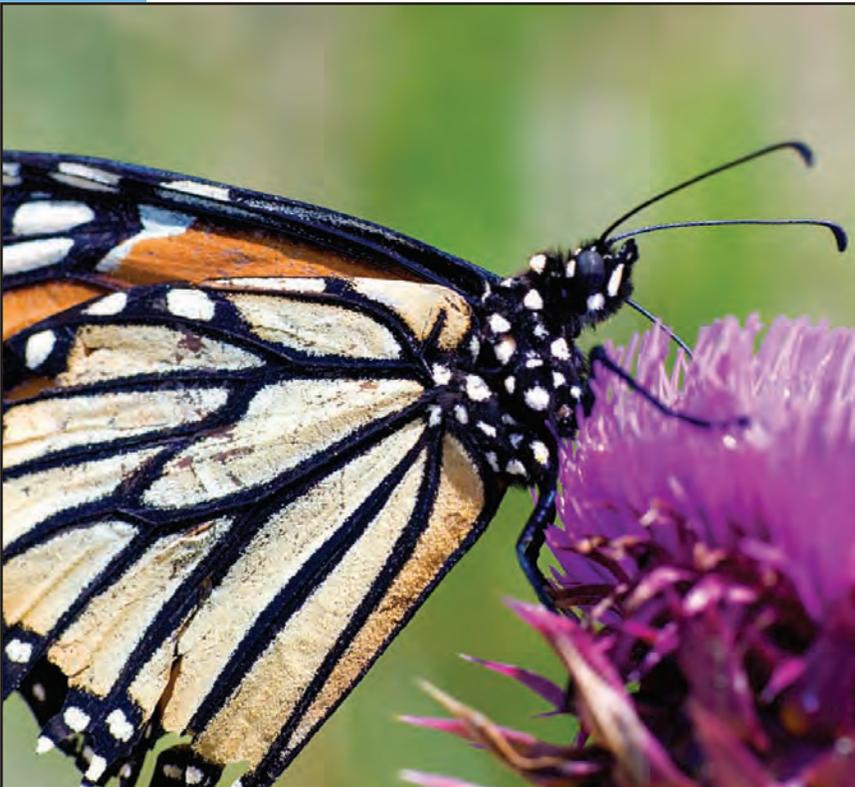


State Parks will continue to make progress on statewide trail efforts in the coming year to include assessment and rehabilitation of trails at Sugarite Canyon State Park after the devastating Track Fire, trail assessment at Cerrillos Hills State Park, and statewide mapping and signage projects.

**STATE PARKS MARKETING PROGRAM:**

This program undertook new initiatives in 2011 to promote parks across the state and the country. State Parks marketed more than 35 “signature events” and countless additional programs featuring star parties, festivals, guided walks, and fishing derbies. Many of these events served as fund-raisers for local non-profits as well as for State Parks, enhancing community relations and park visibility and enticing new visitors. The marketing focus was on activities for all ages, rather than a generic State Parks message. Utilizing up-to-date high-definition television ads, state parks were shown in their splendor. Also, State Parks advertised park events and offerings through local radio stations.

Photo by: Steve Cary



In addition, articles, press releases and promotional filming were effectively utilized by State Parks to obtain vital exposure for the parks. The Travel Channel chose Elephant Butte Lake State Park as the “Best State Park in New Mexico” in 2011 and filmed a 20-minute segment airing in June and July, the prime season for parks. Oprah Winfrey’s new network “OWN” filmed at Vietnam Veterans Memorial State Park for a segment of Lisa Ling’s “America” which aired this year as well.

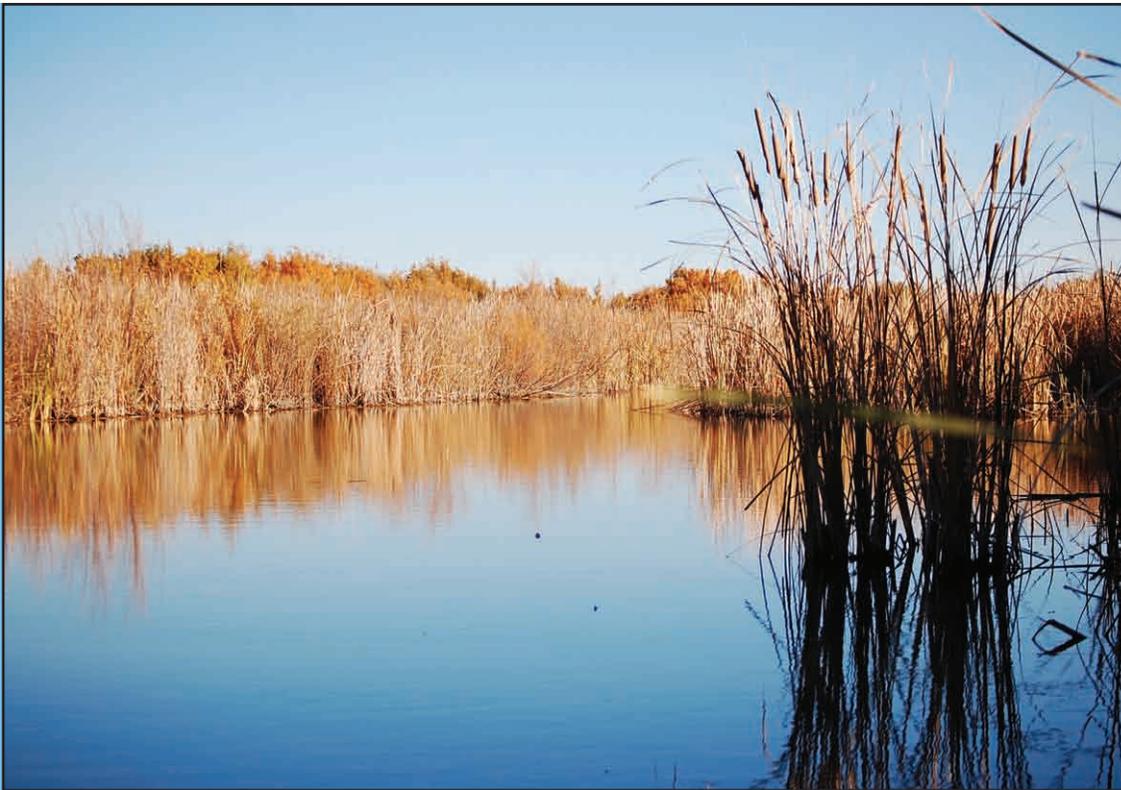
Sugarite Canyon State Park’s *Bodacious Butterflies* is a popular event.

The Marketing Program continued sending out the popular “E card” which has been picked up by partners and circulated to an estimated 15,000 e-mail accounts. State Parks’ main marketing theme to appeal to the current economic climate and the popularity of “stay-cations” (vacations close to home) continued with the advertising campaign of *Short Trips... Long Memories.*

Photo by: Chris Martinez



Photo by: New Mexico State Parks Division



Dancer at Pancho Villa State Park.

Mesilla Valley Bosque State Park.



# Energy, Minerals and Natural Resources

## Department



Photo by: Dan Ware

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- 69-26-1 (1933, as amended through 1989)
- 69-26-2 (1933, as amended through 1989)
- 69-26-3 (1933, as amended through 1989)
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For more information on the Energy, Minerals and Natural Resources Department visit:  
[www.emnrd.state.nm.us](http://www.emnrd.state.nm.us)

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