



College of Agricultural, Consumer and Environmental Sciences

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Agricultural Experiment Station

MISSION: NMSU’s Agricultural Experiment Station (AES) is the principal research unit of the College of Agricultural, Consumer and Environmental Sciences. The AES system supports fundamental and applied science and technology research to benefit New Mexico’s citizens in the economic, social, and cultural aspects of agriculture, natural resource management, and family issues. The AES system consists of scientists who work on NMSU’s main campus and at off-campus Agricultural Science Centers (ASCs) in **Alcalde, Artesia, Clayton, Clovis, Corona, Farmington, Las Cruces, Los Lunas, Mora, and Tucumcari.**

This expansion request is for operational funds to help maintain AES facilities at the off-campus ASCs. A 2012 study conducted by NMSU’s Office of Facilities and Services estimated repair costs for six ASCs at over \$12 million. The remaining ASCs, not evaluated in this study, have similar needs. The Agricultural Experiment Station’s current operations budget (\$124,000) for maintenance has remained stagnant for 15 years while the cost of performing routine repairs escalates.

These centers also provide STEM-based, hands-on educational training opportunities for high school, undergraduate, and graduate students and deliver outreach to stakeholders and the public through field days and other events.

APPROPRIATIONS

FY19 Actual: \$13,865,900

FY20 Request: \$14,314,900

\$449,000

Building Renewal and Replacement Request for Ag Science Centers

NMSU’s Agricultural Experiment Station system maintains research facilities state-wide. Our scientists develop research programs that address key needs identified by advisory boards and local stakeholders. These facilities, located across a wide range of geographic and environmental conditions, provide research results that sustain and support New Mexico’s diverse environments, farms, ranches, forests, and rural and urban communities.

ACES Pillars for Economic and Community Development



The College of Agricultural, Consumer and Environmental Sciences is an engine for economic and community development in New Mexico, improving the lives of New Mexicans through academic, research, and Extension programs.

Selected Agricultural Science Center (ASC) Impacts

Find more ACES impact stories at aces.nmsu.edu/impacts.



- **Researchers from the Farmington ASC** were part of an NMSU team of first responders evaluating and monitoring the impact of the 2015 Gold King Mine spill in the Animas River. Data from soil and water quality testing are helping local farmers and the Navajo Nation make informed decisions and have confidence in resuming their farming activities.
- **Cropping systems research at the Clovis ASC** has identified alternative crops and management strategies that use 25% less water, increase profitability, and improve environmental quality in dryland and limited-irrigation cropping systems.
- **Forage research conducted at the Los Lunas ASC** shows potential savings of \$100/acre by using improved crop management strategies, such as better species and variety selection, proper fertilizer and seed inputs, and improved water use efficiency. Based on annual forage production in New Mexico, the potential impact exceeds \$35 million.
- **Research conducted at the Chihuahuan Desert Rangeland Research Center** is helping to improve cattle genetics with an emphasis on traits that enable cattle to range farther and broaden their food sources. These animals, which are more resilient during periods of drought and forage scarcity, lower the impact of beef production on Southwestern ranches.
- **Research at the John T. Harrington Forestry Research Center at Mora** is investigating planting strategies using drought-tolerant species to aid in post-fire restoration for forests in the arid Southwest. Reforestation success has improved from 20% to over 80% using these strategies.
- **Organic research at the Sustainable Agriculture Science Center at Alcalde** is helping Northern New Mexico's small farms expand their markets and meet demands of the local consumers. Based on work conducted at the center, local producers are growing and selling organic strawberries, grossing the equivalent of \$40,000 per acre.
- **Feed efficiency testing conducted at the Tucumcari ASC** has led to beef herd efficiencies, increasing the value of New Mexico's beef cattle industry by over \$800,000 annually.
- **Manure management strategies and soil test software developed at the Artesia ASC** optimize nutrient rates from various sources to reduce potential nitrogen contamination and avoid extreme remediation expenses for New Mexico's dairy industry.
- **Research conducted at the Clayton Livestock Research Center** is focusing on health and performance of highly stressed calves. This research is identifying ways to reduce bovine respiratory disease, which costs the beef industry \$2-3 billion annually.
- **Collaborative crop variety trials conducted at Leyendecker, Fabian Garcia, and several other ASCs** provide performance results over a wide range of soil types and environmental conditions. Results from these trials allow producers to select the best varieties for their specific farming operations.
- **Research conducted at the Corona Range and Livestock Research Center** identified a seasonal diabetic disorder in cattle grazing on dormant forages and developed a solution to this worldwide problem.

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