

Unranked Capital Request:

Funding of \$400,000 was appropriated by the sixty-third Legislative Assembly. Bids received for the project were significantly over budget. The amount requested is an estimate to complete the project as presented. The amount was calculated by the architectural firm that has been contracted for all agronomy lab construction projects that were funded this biennium.

Agronomy Lab CGREC

With the addition of a forage agronomist at the CGREC, the center is in need of a forage lab building. Currently samples collected in the field by the scientist are processed in a corner of an equipment storage building with a dirt floor. The dust from opening the overhead door and moving equipment renders this area very dusty and difficult to keep scales and computers clean. The new building would house the forage drying ovens, computer, scale etc. for sample data processing. It would also house the grinders and equipment to process the forage samples in preparation for nutrient analysis. - \$783,796



Ranked Capital Requests:

1. Veterinary Diagnostic Lab replacement - Main Station

The NDAES Veterinary Diagnostic Lab (VDL) may lose accreditation because it does not meet modern laboratory standards. Loss of accreditation would affect North Dakota veterinarians and livestock producers relying on the facility for test results; would affect affiliation with the National Animal Health Laboratory Network (subsequently affecting funds for diagnostic equipment, proficiency testing for regulatory diseases, partial salary support for an IT position, and would prevent competition for surveillance testing contracts); would restrict access to Federal funds for bioterrorism preparedness and partial funding of technical support; inhibits the ability to conduct regulatory testing for animals crossing state and international borders; restricts surveillance of diseases of human health significance, such as rabies, anthrax, and West Nile virus; affects the ability of the VDL to participate in the Veterinary Laboratory Response network for toxicology testing. Veterinary clinics often require the use of an accredited veterinary diagnostic lab for biopsies and bacterial culture. The loss of accreditation would result in significantly higher costs for animal health and regulatory testing for North Dakota livestock producers, veterinarians, and the public. The state would be unable to respond to animal health emergencies in a timely fashion.

A new and modern facility to house the veterinary diagnostic laboratory (VDL) at North Dakota State University should be a minimum of 20,000 square feet (current facility is approximately 8,000 square feet) and be designed to allow cost effective addition of laboratory space, as needed, to meet future testing demands (i.e. meat testing, analysis of feed and animal samples for petroleum residues, international export testing). The facility should include adequate laboratory and office space for sample receiving, toxicology, serology, information technology, administration, clinical pathology, gross pathology, histology, quality assurance, bacteriology/mycology, virology and molecular diagnostic sections. In addition, space to house a library and conference/meeting room that can accommodate presentations for producer groups, veterinary groups and student groups should be included. Since the future of carcass rendering is uncertain, it is necessary to install a tissue digester to ensure safe and adequate carcass disposal capacity. A new VDL needs to have dedicated Biosafety Level 3 necropsy/laboratory space (including the ability to capture effluent) to safely address current and future public health threats and potential introductions of foreign animal diseases. This facility should have a biosecure visitor's entry with dedicated bathrooms. Adequate parking space, semi-truck and trailer access and a radiology room are needed. An enclosed receiving area that will allow for off-loading of animal carcasses, as well as live animals that may require euthanasia, is required. Appropriate storage for archiving records and data storage is necessary. Adequate freezer space for individual labs and lockup of samples involved in litigation cases is important. The post mortem laboratory should have access points that allow shower-in/shower-out capability for personnel as well biosecure entry and exit points to safely contain animal and human pathogens. The entire building must be sufficiently secure with electronic card key access to individual laboratories. An alarm system including monitoring of major equipment, and a back-up power source are necessary as well. Building surveillance cameras are suggested. - \$18,000,000

2. Meats Lab Facility – Main Station

A new/upgraded facility urgently needed. The current Meats Lab is approximately 7,500 sq. ft. and was built in the 1950's and no longer serves the needs of modern meat science research. Annual repair and maintenance costs to the current facility continue to increase. Additionally, the Lab continues to struggle to meet the U.S. Department of Agriculture inspection requirements for safe meat handling and processing. A new facility is necessary because opportunities to grow the state's livestock industries are tied to the knowledge of the end product and how that product meets the needs of national and international consumers. Design features of a 19,000 sq. ft. facility would include animal holding and handling areas, an abattoir, processing and fabrication rooms, research labs, walk-in coolers and freezers, sensory evaluation labs, preparation kitchens, conference rooms, and other miscellaneous support, storage, and equipment rooms. - \$7,600,000

3. Seed Cleaning Facilities – CREC, LREC, NCREC, WREC

Seed cleaning facilities at CREC, LREC, NCREC, and WREC need to be replaced. Current facilities are antiquated, lack reliable capability to ensure high quality seed, are slow, and inefficient. These facilities were designed to handle cereal crops and have limited/no capability of cleaning pulse crops and other fragile seed that are in high demand. Also, the existing facilities pose considerable worker safety issues. The request is for four portable mills and a storage facility for the mill when not in use. Each Center will have one mill, with appropriate air screen cleaner, indent mill and gravity mill, augers, conveyors, and cyclone dust cleaning system. The capacity would be approximately 300 bu/hr, depending on type of crop being cleaned. The facility will have the appropriate electrical, ventilation, and heating necessary for electric eye separators (at CREC, NCREC, and WREC) to ensure a high quality product. - \$5,250,000

One-time Requests:

Oil Patch Salary Differential Pool

The oil industry on the infrastructure, salary, and cost of living in western North Dakota is having a wide and lasting impact on the state's western population and the state's workers residing in the area. This will provide salary support to aid in the retention and recruitment of Experiment Station employees at RECs located in oil-impacted counties, which are experiencing the pressure of high market competition and high housing costs. - \$430,000

Deferred Maintenance Increase

Deferred maintenance funding continues to be an important issue. Updates and repairs to facilities that enhance worker safety and productivity are needed across the AES. The CGREC, specifically, has maintenance issues with all residences, barns, and office buildings. Similar issues exist at other centers, primarily with respect to facility updates and repairs. - \$1,440,465

Main Station Greenhouse

- Increase geothermal well capacity \$1,200,000 – funding for the greenhouse construction allowed for a portion of geothermal wells to be installed – the system is working well, but additional well capacity is needed to heat/cool the headhouse building. It is estimated that 200 additional wells will be needed, given the high heating and cooling demand of the facility.
- Utilities \$400,000 – underestimated in construction phase. As the BL-3 portion of the facility comes online, utility costs will increase further. This request would provide needed funds and allow data to be collected on usage and costs that will be used for a formal permanent request in 2017.

- \$1,600,000