Minnesota Dairy Research/Education and Consumer Outreach Authority

Annual Report



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Background and Introduction

The Dairy Research, Teaching and Consumer Education Authority (Authority) was established by the 2012 Minnesota legislature (Statutes 32C.01). Since its inception, the Authority's Board of Directors has worked to enhance Minnesota's research and teaching capacities to meet the needs of the next generation of producers and build a foundation for the future of dairy in Minnesota. The nine member Board is made up of representatives of dairy processors, educators, agricultural lenders, farm and dairy organizations and dairy producers.

Authority Board of Directors

Sheryl Meshke, Co-President and CEO, Associated Milk Producers Inc. (Chair) Dr. Brian Buhr, Dean, University of Minnesota CFANS Barb Liebenstein, dairy producer and Midwest Dairy Association Eunice Biel, dairy producer and Minnesota Farmers Union Daniel Glessing, dairy producer and Minnesota Farm Bureau Dr. Douglas Allen, President, Ridgewater College and MNSCU Greg Jans, dairy producer and Minnesota Milk Producers Association Clint Fall, President, First District Association Commissioner Dave Frederickson, Minnesota Department of Agriculture

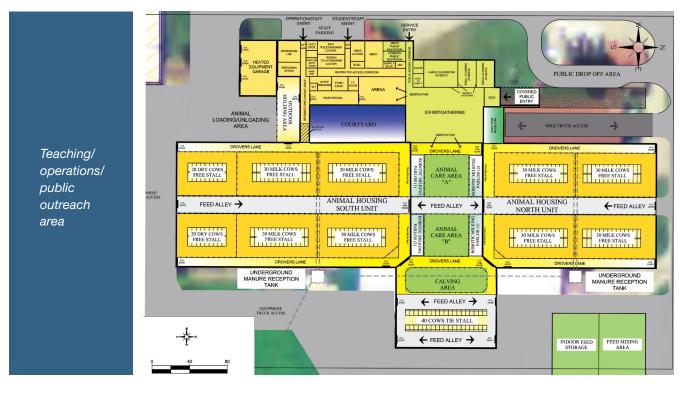
Authority Highlights

After a thorough review of existing research facilities in Minnesota and surrounding states, the authority Board members focused on a feasibility study for upgrades to current dairy facilities at the U of M, St. Paul campus. Members agreed to fund a pre-design/feasibility study with primary emphasis on research and education needs. Funding for the study was obtained in 2014 from the Minnesota Department of Agriculture (MDA), Midwest Dairy Association and Land O'Lakes. The study began in the spring of 2015 as land use and engineering requirements were identified to replace the existing 120-cow dairy facility with a new state-of-art 240-cow facility

While the feasibility study was underway, the Authority discussed fundraising protocol, potential donors and procedures for the receipt and disbursement of funds. Authority members agreed to contract the services of Daryn McBeth of Gray Plant Mooty to provide independent fundraising services, working closely with the University of Minnesota Foundation staff. The services of McBeth began in October 2015 and will continue for a period of 12 months. The agreement will focus on three priorities: Legislative liaison (bonding/lobbying); fundraising and messaging; and the coordination of activities between the dairy industry and U of M.

Report Highlights

- The engineering firm Resource Engineering Associates, Inc., or "REI" assessed the feasibility and cost of building an upgraded, modern dairy facility on the St. Paul Campus rather than in a rural location. In November 2015, REI submitted a pre-design and feasibility study for a 240-cow dairy facility to replace the existing dairy to be located south of the equine center on the St. Paul campus. The estimated cost of the new facility would be \$28.6 million.
- 240 milking cows with a robotic system are planned (4 robots) with free stall housing. The facility is designed to
 maximize the use of technology (i.e. electronic monitoring of intakes, gating, radio frequency identification (RFID)
 tags, camera monitoring, efficient lighting, etc.).
- The facility will feature separate entrances for staff and visitors, a feed storage and mixing area, classroom area and underground manure tanks.



- Operational traffic is anticipated to increase truck traffic only 10 to 20%.
- Free stall housing will exist for all but 40 cows that will be housed in a tie-stall facility for research purposes.
- Plans call for the separation of manure solids and the use of composting.
- Discussions continue on the possibility of using broader U of M waste streams in future digester technology.



housing/ robotic dairy research area

Significance of facility

- A state-of-the-art research, teaching, and consumer education facility will be critical to our state and region's dairy infrastructure.
- Research findings and insights from the facility will advance dairy farm productivity, environmental sustainability, and regional economic competitiveness. Production and research opportunities include:
 - Robotic milking systems and other emerging technologies will provide a multitude of learning opportunities
 - Lecture and observation facilities will support unique student and management training and learning opportunities
 - Studying and experimenting with various practices that affect cow comfort, nutrition, reproduction and overall
 animal health in this academic setting will produce numerous benefits not possible from private commercial
 dairies
- A dairy research facility managed and operated by the University of Minnesota and situated on the campus grounds in close proximity to the students, faculty, and public at large, will offer unique learning and research opportunities.
- As an educational facility for teaching and instruction to undergraduate and graduate students, and allied dairy industry technicians and managers, the facility will support next-generation talent.
- A modern facility located in the center of a major metropolitan area offers a unique opportunity to advance education about dairy production and practices to a broad audience. This will increase understanding and support for dairies in Minnesota that are economically, environmentally, and socially sustainable.

Next Steps

- The Dairy Authority will seek general obligation bond funding from the legislature, after obtaining the necessary funding commitments from industry partners and private sources and approval from the University of Minnesota Board of Regents if the bonds are to the University of Minnesota Members are working to inform policy makers and stakeholders on the importance of the facility on the St. Paul campus. Conversations are also happening among industry partners, legislative leaders, and University officials to review the facility design, costs, and overall requirements of the State of Minnesota.
- In order to seek the necessary level of funding from industry partners, the U of M Foundation is preparing materials for the fundraising campaign.
- The timing of the request for bonding approval will depend on several factors, a critical factor being the financial support from private contributions for the bonding debt service and operations support of the facility with the goal of creating solid financial footing and positioning the project for success.

Administration expenses of the Authority were primarily covered by the MDA, with total administrative costs for FY15 under \$1,000. MDA staff involved with the Authority included Assistant Commissioners Charlie Poster and Santo Cruz, and Agricultural Marketing and Development staff David Weinand and Curt Zimmerman.

At the end of FY15, the Authority had no assets and made no changes to its operational plan. In addition, no significant changes to the bylaws, policies, rules or programs were noted.