



AGRICULTURAL PRODUCTS UTILIZATION COMMISSION

GRANT REPORT 2017-2018



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APUC COMMISSIONERS



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Governor's Appointee



BILL ONGSTAD
Commissioner's Appointee



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NDSU President



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Agriculture Commissioner



KEITH PELTIER
Governor's Appointee

ADMINISTRATION

The North Dakota Agricultural Products Utilization Commission (APUC) consists of nine members. The governor appoints five members to two-year terms. Three of these appointees must be actively engaged in farming and two must be actively engaged in business. The Commissioner of Agriculture appoints one member to a two-year term. This member must also be actively involved in farming. All terms begin July 1.

The board also includes three statutory members or their designees:

JOHN F. SCHNEIDER, EXECUTIVE DIRECTOR
Economic Development and Finance Division,
North Dakota Department of Commerce

DEAN BRESCIANI, PRESIDENT
North Dakota State University

DOUG GOEHRING, COMMISSIONER
North Dakota Department of Agriculture

APUC STAFF



KERRI KRAFT
Program Specialist



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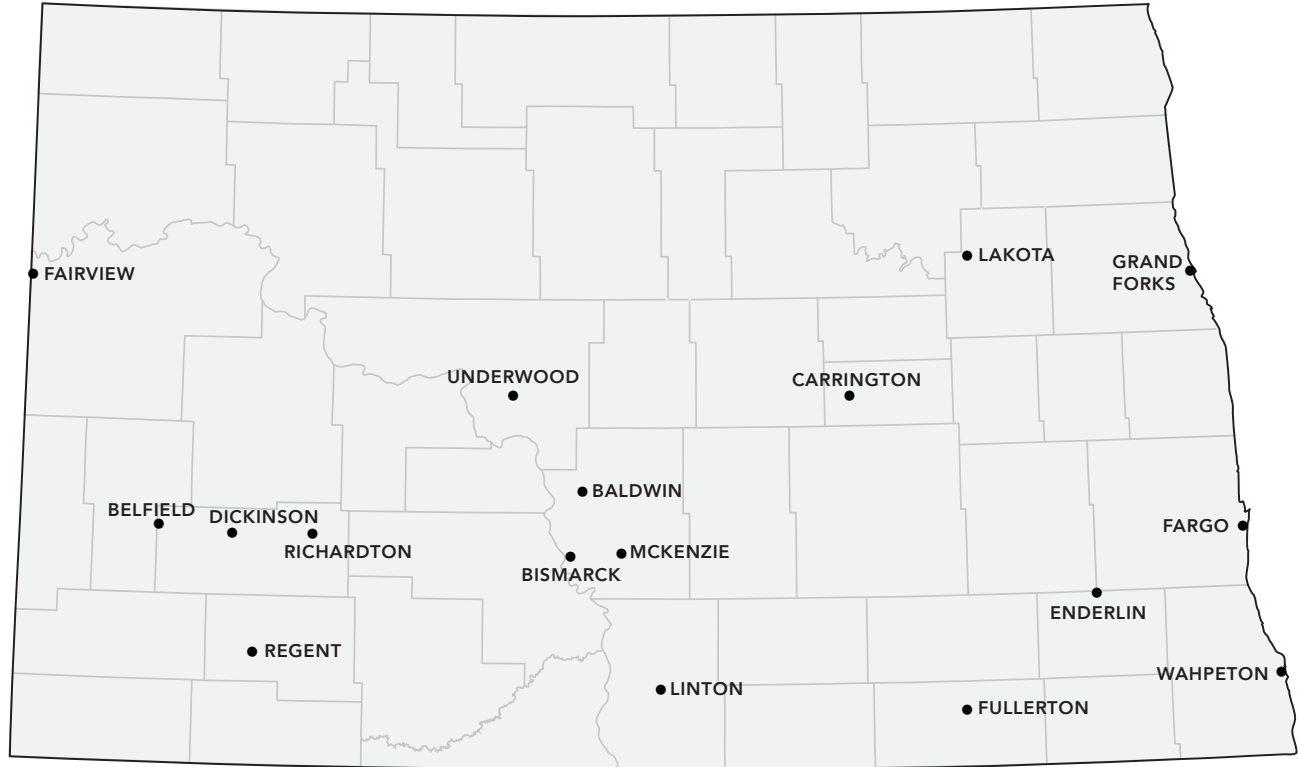
KEVIN SONSALLA
Economic Development &
Finance Proxy



JOLEEN LEIER
Executive Assistant



BETWEEN DECEMBER 2017 AND DECEMBER 2018, APUC FUNDED 28 PROJECTS IN 17 NORTH DAKOTA COMMUNITIES, TOTALING OVER \$1.3 MILLION IN GRANTS AND SPONSORSHIPS.



APUC is an office within Economic Development and Finance, a division of the North Dakota Department of Commerce.

- Baldwin - Dakota EcoBeef LLP
- Bismarck - Pulse USA
- Fargo - NDSU Center for Social Research, Dept. 2362
- Fargo - Elinor Specialty Coatings, LLC
- Fargo - NDSU Dept. of Coatings and Polymeric Materials, Dept. 2760
- Fargo - NDSU Dept. of Microbiological Sciences, Dept. 7690
- Wahpeton - M Squared Genetics, LLC
- Grand Forks - University of North Dakota
- Fargo - NDSU Coatings and Polymeric Materials
- Carrington - Farm Diversification
- Belfield - Ridl's Country Fixins, LLC
- Enderlin - Archer-Daniels-Midland Company
- Wahpeton - Grand Prairie Agriculture, LLP
- Fairview - Safflower Technologies International, LLC
- Underwood - Great River Energy
- Fargo - Anchor Ingredients Co, LLC
- Fargo - Prairie Brothers Brewing, LLC
- Fargo - NDSU Dept. of Agribusiness and Applied Economics, Dept. 7610
- Richardton - Stone Mill, LLC
- Regent - Pheasants Dakota
- Fullerton - Geo-Matoes, LLC
- Dickinson - Baker Boy Bake Shop, Inc.
- McKenzie - Black Leg Ranch
- Lakota - Stump Lake Lodge
- Bismarck - North Dakota FFA Foundation
- Fargo - Myriad Mobile, LLC
- Linton - Plains Mobile, Inc.

BASIC & APPLIED RESEARCH

Basic & Applied Research Grants assist in research for processing agricultural products and by-products in North Dakota. These grants cannot be aimed at business expansion or creation without regard to agricultural products, must not include research that cannot reasonably be expected to result in a marketable product, or cannot have been duplicated by other research efforts.

COMPREHENSIVE ASSESSMENT OF THE ECONOMIC CONTRIBUTION OF THE AGRICULTURE INDUSTRY IN NORTH DAKOTA

NDSU Center for Social Research
Nancy Hodur, Fargo

Grant Amount: \$230,929
Total Budget: \$288,662

NDSU Center for Social Research is seeking grant funds to estimate the economic contribution of the agriculture industry to the North Dakota economy. The agriculture industry is broader than the production of agricultural commodities. This study will include an assessment of not only agriculture commodity production, but value-added processing, farm-input manufacturing and commodity handling, merchandising and processing. Grant funds will be used to support research staff at NDSU to complete data collection and analysis of the project.

EVALUATION OF BIO BASED RESINS FOR ANTI-CORROSION PROTECTIVE COATINGS

Elinor Specialty Coatings LLC
Dante Battocchi, Fargo

Grant Amount: \$24,675
Total Budget: \$30,875

Commercially available soy-based resins will be evaluated and tested as raw materials for use in formulations of corrosion protection coatings. Elinor Specialty Coatings has commercialized a chromium-free primer for use on automotive aluminum based on technology from research conducted at North Dakota State University. The possibility of utilizing North Dakota soybeans to replace petrochemical resins in the formulation of this novel coating will increase market potential for agricultural products and create more manufacturing flexibility for the Fargo-based company.



VEGETABLE OIL-BASED LATEXES FOR COATINGS AND PAINTS

NDSU Dept. of Coatings and Polymeric Materials
Andriy Voronov, Fargo

Grant Amount: \$25,000
Total Budget: \$36,250

The main goal is to determine the feasibility of using emulsion polymerization of monomers developed from oil-seed crops produced in the state of North Dakota for synthesis of vegetable oil-based latexes and their application in paints and coatings. This work represents the important technical milestone required to assess the feasibility of commercializing this technology. Specific aims of this proposal include evaluating a broader range of vegetable oils (including sunflower, canola, linseed oil) to show whether an extended library of novel vegetable oil-based latexes is possible, and if so, how well-suited they are for further applications for paints and coatings. The long-term goal of this study is to replace some of the petroleum-based monomers in polymer latexes with monomers based on either soybean, sunflower, canola or linseed oil, at a price point that is comparable, and with the same equipment and processes, and with identical or better performance of the end paint or coating.

EPIDEMIC VACCINES FOR INFLUENZA VIRUSES

NDSU Dept. of Microbiological Sciences
Kimberly Sheela Ramamoorthy, Fargo

Grant Amount: \$70,360
Total Budget: \$87,960

NDSU Dept. of Microbiological Sciences is conducting research to apply a novel, proprietary method for the development of rapid-response vaccines to swine influenza viruses. The developed methods can potentially have wide applicability to other influenza viruses and RNA viruses.

To meet the need for improving technology for first-response vaccines, in a project previously funded by APUC, NDSU Microbiological Sciences developed a unique and proprietary method to produce a safe and

effective first response against the porcine epidemic diarrhea virus (PEDV). An RNA virus which appeared in the U.S. in 2013, PEDV caused widespread devastation and economic damage to the pork industry. In this project, the department proposes a logical extension to its previous work in extending the technology to influenza viruses. The department expects that completion of the proposed work will enable it to develop a product portfolio, establish a start-up company and attract a private investment. The proposed methods for epidemic vaccine development can potentially add value to autogenous vaccine manufacturing by significantly improving the safety and efficacy margins and hence, is of interest to this vaccine manufacturing sector as well.

The number of newly emerging infectious diseases has increased significantly over the last few decades due to changing practices in trade, travel and farming. Effective pandemic or emergency preparedness plans require the availability and rapid development of first-response vaccines for emergency use. Influenza is an important zoonotic infection of humans and production animals. The periodical emergence of new influenza viral strains in swine and poultry places a severe economic stress on the respective industries.

BASIC AND APPLIED RESEARCH GRANT

Northern Ag Development Corp.
Kevin Skunes, Fargo

Grant Amount: \$31,500
Total Budget: \$231,500

Northern Ag Development Corp. intends to contract with the National Agricultural Genotyping Center for development of a laboratory test kit that will provide early detection of bacteria in the fermentation tanks of ethanol plants. Three ethanol plants, two of which are in North Dakota, will serve as beta test sites.



M SQUARED GENETICS LLC

Aaron Mohs, Wahpeton

Grant Amount: \$72,000
Total Budget: \$133,350

M Squared Genetics LLC was formed to breed soybeans in North Dakota. There has been a lack of research in early maturing, non-GMO food-grade soybeans to suit the needs of growers raising non-GMO soybeans for multiple food-grade soybean processors in North Dakota, South Dakota and Minnesota. We intend to build off an existing breeding program and provide outstanding genetics to fill that void.

ADVANCED INTEGRATED SOLAR-LFP BATTERY POWERED WATER PUMP SYSTEM FOR REMOTE FARM FIELDS

University of North Dakota
Yong Hou, Grand Forks

Grant Amount: \$15,000
Total Budget: \$156,778

Farm field subsurface (tile) and surface drainage greatly contribute to the farmer's profit in crop production. With more than 70 percent of the state in drought, livestock producers in North Dakota need tools to water their animals from clean water source. Many fields, however, are remote with no access to utility power lines to operate pumping systems. The objective of the proposed work is to design and develop an advanced integrated solar-LFP battery-powered water pump system that is reliable economically and capable of continuous performance in the harsh North Dakota environment.

PLANT OIL-BASED POLYMERS FOR PERSONAL CARE PRODUCTS

NDSU Dept. of Coatings and Polymeric Materials
Andriy Voronov, Fargo

Grant Amount: \$30,000
Total Budget: \$68,905

This proposal's main goal is to determine the feasibility of using free radical polymerization of monomers developed from oil-seed crops produced in the state of North Dakota for synthesis of plant oil-based polymers and their application in personal care products. This work represents the important technical milestone required to assess the feasibility of commercializing this technology. Specific aims include evaluating a broad range of plant oil-based monomers (including sunflower, canola, linseed, soybean oil) that will show us whether an extended library of novel plant oil-based polymers is possible, and if so, how well-suited they are for further applications for personal care products, in particular, surfactants and rheology modifiers.

The long-term goal of this study is to replace some of the petroleum-based monomers in polymers for personal care applications with monomers based on either soybean, sunflower, canola or linseed oil, at a price point that is comparable, and with the same equipment and processes, and with identical or better performance of the end personal care product.



APUC BASIC AND APPLIED RESEARCH:
M SQUARED GENETICS LLC

M Squared Genetics LLC invested its \$72,000 APUC funding in equipment to improve efficiency in our soybean research and development program.

“We purchased an Almaco SPC 40 2-row plot combine and an Almaco plot thresher,” Aaron Mohs of M Squared Genetics said. “These two machines greatly increased our plot harvest efficiency and gave us more reliable yield data. We have harvested replicated research plots at four locations that included thousands of potential new varieties with different agronomic and end-use characteristics.”

Now that we have harvested all that material, the team will analyze the yield data, as well as the compositional data. M Squared Genetics LLC also purchased a Perten NIR machine that analyzes the composition of soybean samples. In a matter of seconds, this machine provides results that include 42 different parameters, including proteins, sugars, digestible fibers, oils – including oleic and linolenic – without damaging the sample.

“APUC funding allowed us to purchase equipment that has greatly increased the efficiency of our soybean research efforts,” Mohs said. “We will continue to utilize these investments for many years to develop soybean varieties that yield well and can bring a premium to North Dakota farmers while also adding value to processors.”

M Squared Genetics LLC hopes to continue improving demand for North Dakota soybeans.

FARM DIVERSIFICATION

Farm Diversification Grants give priority to projects dealing with the diversification of a family farm to non-traditional crops, livestock, or on-farm, value-added processing of agricultural commodities. Traditional crops and livestock are generally defined as those that the North Dakota Agricultural Statistics Service maintains statistics on. The project must have the potential to create additional income for the farm unit.

ON-FARM GELATO PRODUCTION

Duchessa Gelato
Wilhelmina VanBedaf, Carrington

Grant Amount: \$62,791
Total Budget: \$125,582

The VanBedaf family would like to start a gelato production facility from their dairy's milk. The end goal is an on-farm creamery and a dairy shop in a major North Dakota city. The production line of gelato will be located on or near the VanBedaf Dairy Farm. The main production will consist of a pasteurizer, pastomaster, batch freezer and blast freezer. They plan to use an authentic Italian gelato cart to market the product at events around the state. The company also plans to package the gelato in pint-sized jars to sell to specialty grocery stores.

MEAT PROCESSING ROOM AND COMMERCIAL KITCHEN

Ridl's Country Fixins, LLC
Clint Ridl, Belfield

Grant Amount: \$32,603
Total Budget: \$42,953

Build a custom exempt/state meat processing room.

Meat Processing Area: Butcher beef, hogs and other meat. We plan to provide custom -exempt and state-inspected level services. We will process state-inspected meat (carcasses or box meat) and whole finished products; perform cutting up, trimming, slicing, grinding, breaking up bulk shipments, wrapping and rewrapping. We will perform curing, cooking, smoking, rendering or refining. We will process meat animals or wild game for the owner of the animal.

Commercial Kitchen: We will harvest our garden and prepare foods for commercial sales. We anticipate preparing barbecue sauces, sauerkraut, sauces, pickles and other products based on growing season results.



APUC FARM DIVERSIFICATION: DUCHESSA GELATO

Duchessa Gelato is a small business that started the summer of 2018 in Carrington, North Dakota.

“Growing up, I knew I wanted to be a part of the family operation, but my heart was not in milk production,” Maartje van Bedaf of Duchessa Gelato said. “My love of dairy manifested in a love of dairy products, specifically gelato. I fashioned a plan to develop my own, unique part of the family business but without the help of APUC, this dream may never have become reality.”

Gelato is an artisan dairy product that is different from ice cream in several ways. It is made with more milk than cream, giving it a lower percentage of butterfat compared to ice cream. It is churned warmer and slower to reduce the amount of air in the product. This unique churning process gives gelato a dense and smooth consistency while eliminating added air and fat.

“My APUC grant helped with start-up costs of my small business,” Bedaf said. “I was able to purchase a pasteurizer, gelato machine and gelato cart. Last spring and summer were a whirlwind of learning, experimenting and growing as a small business,”

Duchessa Gelato has been at the Red River Farmers Market, Foster County Fair, Junk Fest (Carrington) and other private events like weddings, class reunions and luncheons.

“APUC allowed me to develop a new and growing market for my family’s milk,” Bedaf said. “I hope to increase gelato production and experiment with different ways to bring the best dairy products from cow to customer.”

MARKETING & UTILIZATION

Marketing & Utilization Grants provide necessary assistance to the research and marketing needs of the state by developing new uses for agricultural products and by-products, and by seeking efficient systems for processing and marketing these products. These grants are also used to promote efforts that increase productivity, provide added value to agricultural products, stimulate and foster agricultural diversification and encourage processing innovations.

PROTEIN PRODUCTION FACILITY

Archer-Daniels-Midland Company
Mike Keller, Enderlin

Grant Amount: \$93,319
Total Budget: \$122,944

Archer-Daniels-Midland Company (Fargo) is requesting \$93,318 to support preliminary engineering costs for a protein production facility to be located in North Dakota.

GRAND PRAIRIE AGRICULTURE LLP

Taylor Aasmundstad, Wahpeton

Grant Amount: \$45,460
Total Budget: \$58,575

Grand Prairie Agriculture (Devils Lake) is requesting \$26,460 to support initial project engineering to produce a farrow-to-wean sow farm, focusing on gilt production. The project will impact local farmers with another market for their products and provide another fertilizer source in the area.



FEASIBILITY STUDY & MARKET RESEARCH FOR SPECIALTY NON-GMO PROCESSING FACILITY

Safflower Technologies International LLC
 Michael Bergman, Fairview

Grant Amount: \$27,775
 Total Budget: \$57,775

Safflower Technologies International (Williston) is requesting \$27,775 to complete a study for a specialty non-GMO oilseed processing facility with cold press or expeller press system technology for a range of oilseed processing and refining capabilities.

ORGANIC SEED MARKET DEVELOPMENT

Pulse, USA
 Candy Barth, Bismarck

Grant Amount: \$28,350
 Total Budget: \$138,234

Pulse USA is working in partnership with the NDSU Carrington Research Station, Northern Plains Sustainable Ag Society and the NPSAS Farm Breeding Club to develop and market varieties of field peas and cow peas for organic growers. This partnership has already developed three lines of field peas and four lines of cow peas that have been tested and are producing very well in North Dakota field trials. In 2016, Pulse USA passively presented its upcoming release at local and regional conferences and the overall support and interest was very strong. Through APUC, Pulse USA intends to continue securing high-quality genetics developed specifically for organic use and increasing the intensity of the marketing campaign to target the organic grower community, organic regulatory certifiers and organic seed dealers to brand and establish these new varieties into the market. Pulse USA will also work directly with food market suppliers and grocers to introduce the varieties for human consumption. This will help establish

end-user markets, which will translate up and down the entire production chain. This multi-pronged approach to marketing the unique organic lines will help ensure markets for North Dakota seed growers, farmers and processors who join in the production of these varieties. This particular method and market will allow many existing North Dakota acres to be positioned to take advantage of higher value production from both a seed versus commodity perspective, as well as an organic premium versus conventional commodity pricing structure.

FEASIBILITY FOR AN INTENSIVE MANAGED COW/CALF AND FEED BEEF PRODUCTION SYSTEM

Dakota EcoBeef, LLP
 Jacob Carlson, Baldwin

Grant Amount: \$23,888
 Total Budget: \$46,638

This project will determine the financial feasibility of a 1,000-head livestock production company for Dakota EcoBeef, an emerging North Dakota limited liability company. The planned facilities would be designed to house beef cows and their offspring in a unique production system, a three-hoop barn (bedded) structure. This model produces beef on a small footprint, using feedstuffs that are essentially waste/byproducts of grain production. It is designed to harvest manure for fertilizer. Given the limited amount of grazing available to expand the North Dakota cow herd, this is a potential model for beef producers to expand herds in North Dakota.

APUC's investment would support the initial engineering design, business plan and financial projections and statements.



HOUWELING’S TOMATOES GREENHOUSE

Great River Energy
Rich Garman, Underwood

Grant Amount: \$75,000
Total Budget: \$135,000

North American Coal/Great River Energy is requesting \$85,000 to design and operate a greenhouse within Coal Creek Station Energy Park. The funds will be used to explore the feasibility of co-locating a commercial-sized greenhouse near a power plant. The dollars will also be used to explore the market opportunities for the potential greenhouse products (tomatoes, cucumbers, peppers). The project will impact the agriculture industry in North Dakota by adding fresh produce grown in state and allowing farm diversification opportunities.

ANCHOR INGREDIENTS EXPANSION - BUFFALO, ND

Anchor Ingredients Co. LLC
Seth Novak, Fargo

Grant Amount: \$75,000
Total Budget: \$225,000

Anchor Ingredients is expanding operations by adding a pea protein facility in Buffalo, North Dakota. The project seeks to expand the market for the North Dakota-grown and processed peas. Anchor also intends to enhance the existing customer base of these products in the premium pet food and natural products marketplace and establish Anchor Ingredients as a market leader for these products.

PRAIRIE BROTHERS BREWING, LLC

Donald Kenna, Fargo

Grant Amount: \$21,000
Total Budget: \$50,000

Project is to gain awareness of usage of North Dakota grain in the production of beer. Our marketing strategy is to increase sales and production of North Dakota products, including beer and malted cereal grains

produced in North Dakota by North Dakota businesses and farms. By increasing awareness of North Dakota as a premiere producer of malting grains, we feel this will increase sales for our products, as well as increase sales of grains in North Dakota.

FLAX HULL LIGNANS FOR HEALTH AND PROSPERITY

NDSU Dept. of Agribusiness and Applied Economics
Thomas Wahl, Fargo

Grant Amount: \$20,583
Total Budget: \$25,729

With a goal of providing consumers a new, versatile dietary supplement at an affordable price, this product will be positioned as a premium health supplement designed to ease/prevent serious ailments that occur naturally. Sales of this product will add value to North Dakota flax producers, currently producing roughly 90 percent of all U.S. flax seed.

STONE MILL WEST SIDE EXPANSION

Stone Mill, LLC
Daneen Dressler, Richardton

Grant Amount: \$105,000
Total Budget: \$337,500

Ready to launch the next phase of our project, which includes marketing, promotion and automation portions of our business model. While the facility will handle traditional grains, it is also certified organic and kosher, which opens up supply of even more specialty product options for processing, sales, packaging and distribution. The add-on to the facility will be certified gluten-free, which is in high demand by U.S. food manufacturers. All products handled at the west side facility will be inherently gluten-free, as will the warehouse. This requirement alone makes the facility very attractive for use by many industries and food manufacturers demanding this type of certification. It creates marketing opportunities that were limited to us in the past.



LARRY’S LETTUCE

Geo-Matoes, LLC
 Larry Schumacker, Fullerton

Grant Amount: \$10,500
 Total Budget: \$41,250

Larry’s Lettuce is a controlled environment agricultural lettuce producer using hydroponic methods to produce more than 6,000 plants every 30-35 days. This greenhouse is growing green Romaine and Bibb lettuce, along with an assortment of varied leaf lettuces. The production is done year-round and serves the region with quality, locally produced lettuce that is environmentally friendly using significantly less water and having less transportation costs because its local origins. Following changing customer demands, Larry’s Lettuce is grown without soil using one gallon of water versus the 40 gallons of water needed for soil-grown lettuce. Larry’s Lettuce is picked and within minutes placed in a walk-in cooler to be delivered within hours to customers. Larry Schumacker has more than 30 years of growing experience and is the 2016 Hunger Relief Champion for the North Dakota Great Plains Food Bank. Schumacker is a life-long gardener who developed this hydroponic greenhouse with the assistance of the NDSU researchers.

BAKER BOY FILLED RING DONUTS

Baker Boy Bake Shop, Inc.
 Guy Moos, Dickinson

Grant Amount: \$105,000
 Total Budget: \$206,000

These donuts, known commonly by the product names of the “Filled Ring Donut” and “Mini-Filled Ring Donut,” will be marketed to Baker Boy’s existing customers through its 18-state network of salespeople, distributors, brokers and operators. Each donut will be derived from Baker Boy’s current yeast-raised ring recipe and will be sent to customers fried, injected with filling and frozen to await thawing, icing and eventual sale. No mixing, proofing or injection will be necessary on the operator’s end. This allows operators to easily market this product in their stores and reach a large segment of consumers.



APUC MARKETING AND UTILIZATION: ANCHOR INGREDIENTS CO. LLC

The main objective of Anchor Ingredients' APUC grant was to help expand the market for North Dakota-grown-and-processed pulse and specialty crops. Anchor Ingredients also sought to enhance its presence as a market leader for these products.

To achieve this, Anchor Ingredients deployed capital to expand operations by adding multiple facilities in North Dakota, including Anchor's new pea fractionation plant. The plant utilizes the latest production technology and adheres to industry-leading food safety guidelines.

APUC funds were used by the Anchor sales team to participate in trade shows to connect with new potential customers, create brand recognition for Anchor Ingredients and introduce its expanded operation to national and international markets.

"The most profound impact this grant has had on Anchor Ingredients was realizing how important a proactive marketing campaign is and how much of a meaningful impact it can have on a growing business," Seth Novak of Anchor Ingredients said. "As the sales team travels throughout the U.S. and around the world attending trade shows and visiting customers, it continues to hear that the market is very receptive to North Dakota-grown commodities."



NATURE-BASED TOURISM

Nature-Based AgriTourism Grants are for enterprises which seek to attract visitors to a working farm or ranch, or any agricultural, horticultural or agribusiness operation to enjoy, be educated or be involved in activities. Eligible projects include but are not limited to farm or ranch tours, hands-on chores, self-harvesting of produce, hunting operations, fishing operations located on applicants' land, bird watching, trail rides and corn mazes.

OUTDOOR MEETING VENUE

Black Leg Ranch
Jay Doan, McKenzie

Grant Amount: \$26,250
Total Budget: \$72,716

Black Leg Ranch (McKenzie) is requesting \$52,715 to build an outdoor space and meeting area. This meeting space will overlook native grasslands and prairie flowers.

STUMP LAKE LODGE

Chris Ahl, Lakota

Grant Amount: \$21,294
Total Budget: \$47,439

Stump Lake Lodge – formerly Buckshot Lodge in Lakota – is under new ownership by Chris and Anne Ahl and providing lodging and guiding services to hunters, anglers, vacationers and other outdoor sports enthusiasts. The Ahls will be making the apartment-style units more energy efficient and adding modern amenities like flat-screen TVs and Wi-Fi. The new fish cleaning station will be a huge draw.

Guests to Stump Lake Lodge primarily come from North Dakota, South Dakota, Minnesota and Wisconsin. The Lakota area is known for its access to great hunting with thousands of waterfowl migrating through the area in the fall and also access to Devils Lake's 200,000 acres of outstanding fishing.

APUC NATURE-BASED AGRI-TOURISM: STUMP LAKE LODGE

An APUC grant “jump started” the process of updating Stump Lake Lodge into a lodging destination for hunters and anglers along Highway 2 in the Lakota-Devils Lake area.

Stump Lake Lodge really pushes fishing, primarily because of its location next to Devils Lake and Stump Lake. The new fish cleaning station with a Barracuda fish grinder system will be a great attraction for all hunting/fishing enthusiasts.

Walk-throughs have shown others how the new grinder system works. North Dakota Game and Fish plans on installing the same system at its various locations throughout the state.

Aside from the main grinder, there will be stainless steel tables, big screen TVs and an overall sporting environment that will ensure our anglers and bird hunters have an enjoyable experience when cleaning game.

“Guests staying at Stump Lake Lodge get a full “apartment-style” experience,” Chris Ahl with Stump Lake Lodge said. “Each unit is equipped with a fully stocked kitchen, living room, bedrooms and multiple closets, as well as plenty of space to park boats and trailers. All hunters have access to 2,000 acres of land to hunt deer, coyotes or birds. We’ve also teamed up with multiple guides to provide flexible and competitive package deals.”



TECHNOLOGY

BUSHEL SOFTWARE

Myriad Mobile, LLC
Amanda Hanson, Fargo

Grant Amount: \$50,000
Total Budget: \$62,500

Myriad Mobile officially launched its new phone mobile ag platform, Bushel, on June 21, 2017. Bushel is the grain industry's first automated mobile app platform for elevators to connect with their growers and deliver real-time actionable information via a mobile app. The initial version of Bushel was piloted with North Dakota-based elevator network The Arthur Companies, which serve more than 350 growers in eight location, and has grown to 12 elevator clients in the Midwest and counting.

In cooperation with APUC, Myriad Mobile is embarking on a commercialization project that will bring Bushel to the forefront of ag-tech through Myriad's participation in industry-focused tech conferences and trade shows, which have proven to be the largest lead-generator for Bushel by far. Specifically, grant funds will be utilized for trade shows and conferences.

A variety of marketing efforts will be used to bring the product to the market. Activities include, but are not limited to, trade shows, event sponsorships, video production, photography, search engine marketing/optimization, traditional mail campaigns, trade publication advertising, association memberships, content marketing, public relations, media releases and outbound/inbound sales activities.



AGCINECT

Plains Mobile, Inc.
Jon Richter, Linton

Grant Amount: \$10,500
Total Budget: \$230,000

Plains Mobile Inc. is the developer and part owner of AgCinect, which provides cloud-based farm and ranch solutions designed by farmers and ranchers for farmers and ranchers. AgCinect is hosted entirely in the cloud, so it is accessible from any device. This makes it possible to enter and access valuable data in any location via your laptop, pad or phone.

The agriculture industry is becoming more complex, so farmers need a tool to help manage their operations. Not every operation is run by one person with one income and expense system. Many times, there are partnerships or divisions of a farm needing to be reported or analyzed separately. AgCinect allows farmers to break down reports by farm name to give clear insight relating to each entity without manual paperwork. Having multi-entity capabilities gives the power to manage all partnerships and the control to dial into specific aspects of each farm. Most agriculture apps focus on one aspect or area of an operation, AgCinect allows a farmer or rancher to efficiently manage all of their data for all aspects of their operation. AgCinect is the first comprehensive agriculture solution in the marketplace bringing together all the business needs of the diversified farmer or rancher. With AgCinect, farms can track their per-acre yield, inventory, feedlot inputs, calving data and cow herd, as well as accounting requirements like sales, payables, tax information and financials.

APUC TECHNOLOGY: MYRIAD MOBILE LLC

There's a software product, homegrown in North Dakota, that's strengthening the relationship between grain facilities and farmers across the United States. Shortly after launching the product, one grain elevator manager said, "I'm surprised by the number of farmers who are already saying they can't live without it. Even older farmers are on board with it--hard." And what is this homegrown tool that farmers (yes, even older farmers) can't live without? Meet Bushel™.

Bushel™ is the grain industry's first software platform delivering real-time information from grain elevators, cooperatives and ethanol facilities to their growers; informing better business decisions on both sides. Offered through elevator-branded apps, Bushel includes real-time scale tickets, contracts, pre-pays, cash bids, eSign, and contract management. Headquartered in Fargo, Bushel was developed by Myriad Mobile, an enterprise software technology company focused on mobile and web applications.

With the help of a Marketing and Utilization Grant from North Dakota's Agricultural Products Utilization Commission (APUC), Bushel has continued to quickly capture market share across the United States. Since being awarded the \$50,000 APUC grant in December 2017, Bushel has added nearly 50 new clients to the platform.

The funding from APUC helped supplement Bushel's marketing activities. Bushel was able to attend conferences and industry specific trade shows, as well as engage in marketing activities that directly expedited market share gains.

"Our vision for Bushel is to be the number one digital platform for the grain industry that strengthens, and makes more efficient, the relationship between grain buyers and growers," said Jake Joraanstad, Bushel CEO and Co-Founder.




SPONSORSHIP

ND FFA FOUNDATION, INC. SPONSORSHIP 2017

North Dakota FFA Foundation
Tamra Maddock, Bismarck

Grant Amount: \$300
Total Budget: \$300

The North Dakota Future Farmers of America (FFA) Foundation supports leadership opportunities and activities of its 4,500 members in the state. This sponsorship supported of the State FFA Convention June 5-9, 2017, at NDSU in Fargo. Members competed in more than 40 different career development and other award areas for the chance to represent the state at the 2017 National FFA Convention.



APUC SPONSORSHIP: NATIONAL COUNCIL OF STATE AGRICULTURAL FINANCE PROGRAM

The National Council of State Agricultural Finance Programs (NCOSAFP) is a consortium of agricultural financing entities that collaborate to provide national representation for states operating finance programs for farmers, ranchers and the agricultural industry.

“The Council provides information about state programs on farm finance issues and legislation developing in Washington, D.C.,” explains Annette Curl, who serves on the Council’s Board of Directors. “NCOSAFP is also involved in the promotion and support of rural economic development programs.”

North Dakota hosted the 2015 Annual NCOSAFP Conference in Medora and APUC committed to the event’s Platinum Sponsorship Level. The two-day conference consisted of presentations by local leaders and business owners, and tours of nearby farms, an oil rail loading facility and the Dakota Prairie Refinery. The activities showcased North Dakota’s robust agricultural, energy and tourism sectors.

“APUC funds supported a conference that highlighted the state’s economy and to inform attendees about [our] diverse agriculture, tourism and energy industries and how they contribute to the state’s economic prosperity,” says Curl. The conference also highlighted the ways that North Dakota has created unique export opportunities for its goods.



FUNDING SOURCES



APUC’s appropriation for the 2017-2019 biennium totaled \$5,498,754 and was provided from the following sources:

- Up to \$2,956,900 was authorized to be collected from the APUC Special Funds, funded by the North Dakota Mill and Elevator.
- No funding was appropriated directly from the state general fund.
- At the beginning of the biennium an additional \$2,541,854 was authorized as carry-over authority from the previous biennium.

Financials as of September 30, 2018

	Expenditures	Budgeted
Salaries & Benefits	\$ 67,029	\$ 155,115
Operating Expenses	\$ 13,301	\$ 40,900
Grant Commitments *	\$2,020,978	\$2,956,900
Total Expenditures	\$2,101,308	\$3,152,915

Remaining Appropriation: \$1,232,999

* Includes current plus carry-over commitments



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Agricultural Products Utilization Commission

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