

FY10 Agribusiness (Round 2)

Staff Summaries & Recommendations – April 2010

The Commission received 10 proposals for FY10 Agribusiness funds by the March 1st due date and one late-filed proposal (#2087), requesting more than \$2.4 million. The Committee has a balance from the FY10 budget and carried forward funds of \$1,187,192 available for the following grant proposals.

ID	Organization Name	Project Title	Request Amount	Staff Recommendation
2046	Appalachian Agricultural Exposition Center	Appalachian Agricultural Exposition Center	\$100,000.00	\$0
2087	Dan River Business Development Center	Piedmont Bioproducts Demonstration Site Development Project ¹	\$400,000.00	Defer to Committee
2063	IDA of Dickenson County	Coalfield Agriculture Training Facility	\$83,195.00	\$83,195
2041	Town of Farmville	Farmville Area Farmer's Market	\$403,740.00	\$102,000
2052	Nottoway County	Nottoway Farm to Fuel Project	\$621,599.25	\$0
2069	Public Policy Virginia	The Municipal Bio-Power Business Plan	\$50,000.00	\$50,000
2057	Scott County Regional Horse Association	Scott County Horse Park Camp Ground	\$181,460.10	\$115,000
2058	Town of St. Paul	Clinch River Farmers Market Continued Development Project	\$95,109.00	\$0
2003	Virginia Tech	Shrimp Culture in Recirculation Aquaculture Systems	\$436,079.00	\$436,079
2068	Virginia State University	Design, Fabrication, and Testing of a Prototype Sweet Sorghum Grain Harvester	\$22,224.00	withdrawn
2064	The Town of Wise	Big Glades Square - Farmers Market	\$50,000.00	\$0

¹ – late-filed application

Grand Totals (11 items)	\$2,443,406.35	\$786,274
Balance available	\$1,187,192.76	\$400,918.76

Appalachian Agricultural Exposition Center
Appalachian Agricultural Exposition Center (#2046)
\$1,000,000 requested

Funds requested by the nonprofit applicant to assist with the purchase of the Emerson Building, a 21.8 acre former industrial site in the Town of Wytheville. The site will eventually be renovated to establish an exposition center that provides leased office space and hosts a wide array of agricultural sales, shows, training and other events. A show arena would also be constructed on the site. A feasibility study conducted by VT Business Technology Center estimates positive operational cash flow in the second year and annual economic impact of \$5 million from visitor spending. A full time staff of 5-7 is anticipated.

Total project cost is \$4,762,900. Other funds include: \$99,000 USDA Rural Development for replacement doors, bathrooms, signage, and equipment (application pending); \$468,775 Rural Development for construction (loan applications made – monies available); \$535,000 Wythe Bland Hospital Foundation to improve building and assistance in construction of arena (applied for grant in 2/10); \$265,000 Southwest Virginia Horsemen's Assoc. to erect an indoor arena (in hand); \$1,225 private donation to assist with beginning capital campaign (in hand).

Staff comments and recommendation: The requested funds would do little to reach the required financing necessary to purchase the site (\$1.3 million) and to begin to make it operational (roof repairs of \$300,000 are indicated, and \$200,000 of additional renovation costs are not specifically outlined). Preliminary architectural and engineering reports have not been obtained by the applicant (who indicates that a portion of the funds requested herein might be used for this purpose). Additional commitments of funds are needed before this is a viable project, including approvals of the USDA loan and local foundation requests. **Staff recommends no award.**

Dan River Business Development Center
Piedmont Bioproducts Demonstration Site Development Project (#2087)
\$400,000 requested

Note this is a late-filed application, received April 9th. Funds are requested by the nonprofit business incubator on behalf of Piedmont Bioproducts, a Gretna-based client company of the incubator which has been using TICR funds to develop equipment that uses the pyrolysis process to produce bio-fuel from plant materials (see www.piedmontbioproducts.com). Funds are requested for contractual services, supplies and materials, continuous charges, equipment and plant improvements to continue development of the pyrolysis process, equipment and feedstock evaluations that are currently operating successfully (at full operation the demonstration plant is capable of producing 213,000 gallons of bio-oil and 410 tons of carbon char annually, using five tons of biomass inputs per day). Further process refinements and testing are needed before moving into a full commercial scale that could produce 21 million gallons of oil and 41,000 tons of char annually, using 500 tons per day of biomass. Each of the several anticipated commercial scale refineries, scattered across the region, will require 20,000 acres of plant production, employing 200 farmers and 25-30 refinery workers. The work to date has been supported by three Commission grants in FY06-09 totaling more than \$1.3 million. The project has also been supported by grant funds from Virginia's Center for Innovative Technology and uses technology licensed to the company by Mississippi State University.

Total project cost for this phase is \$850,000. Other sources of funds include: \$121,600 in-kind consulting by Ken Moss and James Wagner; \$20,000 Windy Acres Nursery in-kind land rent and equipment utilization; \$6,470 DRBDC in-kind admin support. Other state and federal energy funds to be applied for.

Staff comments and recommendation: The demonstration site is operating successfully at low levels of production to provide fuel for future test burns in conjunction with Sweet Briar College, and arguably represents the most successful development to date of a biomass-to-fuel oil project within the tobacco region. As has been our policy when late-filed applications are submitted, **Staff defers to Committee.**

IDA of Dickenson County

Coalfield Agriculture Training Facility (#2063)

\$83,195 requested

Funds are requested for Phase III development of the Coalfield Agriculture Training Facility in Dickenson County. In previous phases, a sale barn and holding pens were constructed, as well as a 40' by 60' metal shell building to be used for agricultural training. The funding requested in the current application will be used to erect metal sheds over the holding pen area and to build-out, furnish and equip the Agricultural Training Building.

Total project cost is \$597,587. Other funds include: \$128,500 TICRC FY 06 & 09 for scales, pens, sale barn construction, and equipment (expended); \$317,904 VCEDA, Wise, Dickenson, others for bldg., site development, property acquisition, A&E, and legal expenses (received and spent); \$49,334 Wise County for gravel, fencing, welding, construction, lighting, and signage (received – \$25,300 reserved for Phase III project); \$91,203 Dickenson County for utilities, fencing, site development, and construction (received – \$22,688 reserved for Phase III project); \$20,000 Dickenson & Wise County (\$10,000 each, Joint BOS Appropriation) for maintenance and improvements (received).

Staff comments and recommendation: The facility has been built and is operating using small TICR grants along with donated services and materials, as well as funding from two County governments. Several well-attended events benefitting several agribusiness sectors (cattle, equine, sheep, beekeepers etc) have been documented in the facility's first year of operation. The application argues that placing the requested shed over the existing outdoor pens will enhance the per-head sale prices for livestock (net revenue figures are estimated in the application), while the requested interior build-out of the education space will allow producers to attend trainings and then observe best practices at the adjacent pens and barn. While the estimated net revenues may be ambitious, the project is a very well-leveraged and cost effective regional effort that will benefit several agribusiness sectors over the 30+ year life of the facilities. **Staff recommends award of \$83,195.**

Town of Farmville

Farmville Area Farmer's Market (#2041)

\$403,740 requested

Funds are requested to provide a new expanded site for the long-running Farmville Farmers Market. The Town acquired the Middle/Farmville Tobacco Warehouse, a former tobacco warehouse in downtown Farmville adjacent to the High Bridge Trail State Park, in December 2008. The Town proposes demolition of almost 20,000 square feet, the majority of the existing warehouse structure, to create 69 public parking spaces; salvaging a small portion of the building (approximately one-fifth) for creation of a new covered farmers market site. The market will serve producers/vendors who are members of the Farmville Area Farmer's Market Association. The market organization has been in existence for over 30 years, operating at the Town's train depot, where it often conflicts with unrelated events in the depot's meeting space. The

market has twelve seasonal vendors, with representation from Buckingham, Charlotte, Prince Edward, Lunenburg, Cumberland, and Nottoway Counties. The market averages eight vendors each Saturday with estimated gross sales of approximately \$1,500 weekly. The new, larger site would be able to accommodate up to 19 vendors and additional on-site customer parking. TICR grant funds are requested primarily for demolition of the historic tobacco warehouse (\$301,700) and other costs including grading and repaving the demolished area (\$102,000).

Total project cost is \$915,340.50. Other funds include: up to \$50,000 USDA Rural Development (pending, to be applied for); \$511,600.50 Town of Farmville for property acquisition and engineering/architectural services (expended in 2008).

Staff comments and recommendation: The town presents this project as a “unique adaptive reuse” of an old warehouse, however, the majority of this structurally sound building would be torn down to create parking (staff has inquired if this is a “contributing structure” in a designated historic district, and the Town responded that it is not). Proposed match for the project includes \$326,837 in loan payments over the three year project period associated with the \$500,000 purchase of the building. Town staff has stated that on non-market days the parking would be fee-free public parking. The expanded site could presumably double the current aggregated weekly sales for grower/vendors from a multi-county region. **Staff recommends award of \$102,000 for market site development (excluding the requested building demolition costs), contingent on the resulting parking being a fee-free public parking lot on all non-market days and times.**

County of Nottoway

Nottoway Farm to Fuel Project (2052)

\$621,599.25* requested

The County is partnering with the Commonwealth of Virginia’s Piedmont Geriatrics Hospital (PGH) facility to demonstrate large scale heat producing boilers using native switchgrass to provide heat and steam energy for operation of PGH and the adjoining Virginia Center for Behavioral Rehabilitation at half the cost of fuel oil. The County requests Commission funds to construct a storage and processing facility to be located on property owned by the County at Fort Pickett to serve PGH and other facilities that replicate the success of the PGH demonstration. The boiler will serve 435 patient beds (135 beds at PGH and 300 at the rehabilitation center). TICR grant funds are requested for fabrication of a prototype grinder to process biomass (\$450,000), a telehandler for loading and unloading switchgrass bales (\$93,681), purchase and installation of scales large enough to accommodate a tractor-trailer combination (\$66,000), two transport trailers serving delivery and loading during common intervals (\$97,000), a used road tractor for moving trailers (\$20,000), and consulting services (\$10,000); as well as site preparation and construction of a 45,000 square foot biomass storage shed with concrete floor and 24” eaves with capacity to store 7,500 large bales (\$725,000). The PGH facility is expected to use at least 15 tons per day during high consumption months. The application assumes a cost of \$115 per ton delivered, including \$60 per ton contract growing price with farmers and \$55 per ton processing fee. The facility is estimated to benefit 75-100 area farm families, each growing 20 acres of switchgrass. The resulting fuel cost would be approximately half the costs paid by PGH for fuel oil in recent years.

Total project cost is \$1,661,681.25 Other funds include: \$193,000 (match in land and service) County of Nottoway for location for Farm to Fuel Processing Facility (available); \$700,000 Piedmont Geriatric Hospital via DMME grant to modify existing boiler plant to heat NWSG (switchgrass).

*An additional \$847,082 is being requested from Southside Economic Development funds at this time.

Staff comments and recommendation: While initial test burns of switchgrass at PGH have been very successful and the facility has secured substantial DMME funds to upgrade its boilers, the facility has not yet completed the next set of test burns that are required to obtain final DEQ air permitting, and therefore PGH has not yet executed a contract to purchase plant material. There is also little or no evidence that this amount of acreage is currently in production or will be in the foreseeable future in the surrounding localities and at the proposed purchase prices. A full operational and financial plan should also be completed to demonstrate operational sustainability. The project requests funds to construct a new building and purchase equipment for processing and transportation, whereas leasing of a site and certain equipment (e.g. trucks) appears to be a more cost-effective solution until long-term viability is demonstrated. The County is also requesting its entire Southside Economic Development allocation for the project, bringing the total TICR request to more than \$1.4 million. While it is hoped that these hurdles can be surmounted and this promising biomass project will be fully implemented, staff suggests that the above issues must be addressed and additional funding sources explored, including USDA, VA Resources Authority, and others. **Staff recommends no award.**

Public Policy Virginia

The Municipal Bio-Power Business Plan (#2069)

\$50,000 requested

This project would use potential projects in two tobacco region sites to answer essential questions for decision makers considering the development of municipal bio-power projects (e.g. whether feedstock supply is reliable, what are the proven technologies, and what is the bottom line?). A contract with the Antares Group will provide technical and economic performance data for three different scales of biomass energy systems with direct and near-term application to Virginia ranging from a 15 to 25 MW electric generating power plant to the moderate and smaller scale boiler plants for steam production. TICR funds are requested for contractual services for developing the Municipal Bio-Power Business Plan including the feedstock assessment, technology assessment, and financial modeling. The feedstock assessment will focus on supply potential for a stand-alone power plant in the area surrounding the City of Martinsville, while matching funds will focus on feedstock potential for biomass boiler(s) within Grayson County.

Total project cost is \$115,720. Other funds include: \$5,000 Virginia Department of Mines, Minerals, and Energy (DMME) for analysis of Combined Heat and Power economic impact (in-hand); \$5,000 Old Dominion Electric Cooperative for the technology assessment (pledged, contingent upon TIC grant award); \$8,140 Energy Foundation for personnel, overhead, and travel expenses (in-hand); \$3,580 VEE for personnel, overhead, and travel expenses (applied for, will be awarded in April); \$44,000 New River-Highlands RC&D Council for southwest VA project (pledged in-kind contributions).

Staff comments and recommendation: The project was passed by in the first round of FY10 Agribusiness but returns with a much more concentrated focus on two specific tobacco region sites that have expressed interest in this proposal and its process of determining the feasibility of municipal biomass-to-energy projects. The objective is to provide a decision template for these and other local biomass-to-energy projects. **Staff recommends award of \$50,000, contingent on formal participation of two tobacco region localities.**

Scott County Regional Horse Association
Scott County Horse Park Camp Ground (#2057)
\$181,460.10 requested

Funds are requested by the nonprofit applicant to construct camp sites, bathroom/shower facilities, and equine stalls as well as to upgrade the electrical system at the Scott County Horse Park and Campground in Dungannon. The Campground will provide a destination for campers wishing to use the trails in the Jefferson National Forest and other horse trails in Southwest Virginia. The project will add two part-time positions to the Park's operations staff. The requested funds break out among the functional components as follows: permanent and portable horse stalls - \$60,820; ten campsites and park electrical upgrade - \$91,791; bath house - \$24,808; design, permits and landscaping - \$ 5,500. The Association's surveys have shown that 60% of the 500+ visitors to each of its 10-15 annual events come from four surrounding states and spend an average of \$100 per day in local businesses (see www.schorse.org for list of events). Daily rental rates are expected to be \$25 per camp site and \$15 per stall.

Total project cost is \$204,560. Other funds include: \$9,000 Scott County Sheriff's Office to provide labor for the construction of the stables (pledged); \$2,000 Rick Howington to construct bathhouse (pledged); \$5,500 SCRHA labor and money for the construction project (pledged).

Staff comments and recommendation: The proposal has been revised and reduced after being passed by in the first round of FY0 Agribusiness. While this project focuses on one agribusiness sector – the equine industry – it could establish a viable agri-tourism destination for Southwest VA (staff has also been advised by Natural Tunnel State Park officials that the Scott Horse Park facility will not compete with the state park, which is unable to offer equestrian facilities. The applicant also states that equine camping facilities are under construction more than 100 miles away at Grayson Highlands and New River State Parks). The proposal includes a significant in-kind donation of labor and materials. **Staff recommends award of \$115,000 for site development costs associated with camp sites, bath house and related utilities, contingent on annual reporting of aggregated visitation and revenues.**

Town of St. Paul
Clinch River Farmers Market Continued Development Project (#2058)
\$95,109 requested

Funds are requested for Phase III of the development of Clinch River Farmers Market. This phase involves the site preparation and improvement of the Market location, which is ultimately planned to host 40 vendors (27 farmers and 13 artisans). Completion of this phase will provide a paved, utility-served site for the Market, allowing for more functional sale spaces for local farmers and will also provide the groundwork for future construction of a permanent market structure as financial resources become available. The market is part of a larger multi-functional facility called the Appalachia Eco Center that is planned to include an outdoor performance amphitheater, greenspace and parking. The market was initiated in 2009 using temporary shelters at a donated site (Phase I), and generated \$80,000 in sales with an average of nine vendors per day (a total of 22 vendors participated at various times during the first season). Of the Phase I sales, \$50,000 of direct sales occurred during the Market's Tuesday and Saturday hours and an additional \$30,000 of indirect sales occurred through contractual custom orders and added value product sales as a result of contracts obtained through the market's network system. The town is presently completing the necessary steps of Phase II which includes the design and planning of a more permanent Farmers Market Structure.

Total project cost is \$101,609. Other funding: \$5,600 Town of St. Paul for design and professional services (committed, contingent in TICRC Award).

Staff comments & recommendation: The market appears to have had a solid first year of operations in 2009, using temporary canopies and donated space. However, the request appears to involve streetscape infrastructure that serves the larger Eco Center project and the central business district beyond the market area (e.g. 15”- 18” stormwater sewer pipes), which is a low priority for TICR Agribusiness funding. The current request does not include a permanent market structure, which will presumably be requested in a future year. Staff recommends the request be refined and resubmitted in the next Agribusiness cycle to include a permanent structure, remove infrastructure costs for the larger Eco Center project and central business district, and demonstrate a strong second year with baseline sales figures. **Staff recommends no award.**

Virginia Tech

Development of Recirculating Aquaculture Shrimp Production for Both Large and Small-Scale Producers (#2003)

\$436,079 requested

Project was referred from Research and Development Committee, subsequently revised by the applicant to request a reduced amount, and tabled in the Committee’s January meeting. The proposal seeks funds to construct and operate a modular commercial-scale recirculating aquaculture system to conduct Phase 2 research in partnership with Virginia Shrimp Farms LLC (a wholly-owned subsidiary of Blue Ridge Aquaculture, a private company which is currently producing tilapia in Martinsville), to demonstrate the feasibility of large scale shrimp production to investors. Funds are requested for personnel, supplies, equipment and subcontractor fees to conduct research on processes and protocols for raising Pacific white shrimp and freshwater prawns in indoor recirculating tanks, and test market those shrimp to metropolitan markets on the East Coast. VSF invested \$6.2 million in the now-completed Phase 1 research to establish proof of concept and technical feasibility of broodstock production, growout and harvest. A scalable modular growout system would be constructed in this phase to apply those findings to a commercial production scale, thereby reducing costly revisions prior to moving into large-scale production. The applicant states that within two years VSF intends to construct a \$10 million large scale commercial production facility to enable production of one million pounds of shrimp, creating thirty new jobs and generating \$6 million in annual revenues, thereby establishing a shrimp aquaculture industry in Southside Virginia. Within five years, VSF plans to expand to five million pounds of production, and tripling the number of jobs and private capital investment. TICR funds would be used to hire personnel including a project manager and five aquaculture technicians, and partial funding for the lead researcher (\$237,600); contractual services to cover the utility costs to operate the facility, professional services for lab manager to oversee data collection, travel to market shrimp, and shipping fees to transport live shrimp to markets (\$120,721); and materials and equipment for constructing the tanks and circulation systems (\$77,758).

Total project cost is \$595,266. Other funding sources include: \$117,316 VA Tech salaries, fringes and waived indirect; \$41,869 Blue Ridge Aquaculture for in-kind facility use, design and consulting.

Staff comments and recommendation: The proposal has been reduced from its original requested amount. The applicant has confirmed that all employees, equipment and materials will be employed by or owned by Virginia Tech. The project will ultimately and predominantly benefit a single private enterprise (it should be noted that another subsidiary of BRA, Virginia Cobia Farms, is approaching non-compliance on a FY07 TROF award of \$100,000 in Southwest Virginia). The applicant states that research findings will be disseminated across the tobacco region (and beyond) to other potential producers, consistent with

VT's extension mission. Committee tabled project for discussion at its December and January meetings. Staff has visited the site and noted the successful operation of BRA's large volume fish production operations. Assuming the earlier research findings can be translated to larger scale production operations, this project could lead to a substantial private capital investment and add to BRA's ability to employ local residents and attract purchasing of aquaculture products from buyers in major East Coast metropolitan areas, as well as offering potential transferability to subsequent producers in other Virginia communities. **Staff recommends award of \$436,079, contingent on successful resolution of the terms of Virginia Cobia Farm's TROF agreement for its facility in Saltville VA.**

Virginia State University (#2068 – withdrawn by applicant)

Design, Fabrication, and Testing of a Prototype Sweet Sorghum Grain Harvester
\$22,224 requested

Town of Wise

Big Glades Square – Farmers Market (#2064)

\$50,000 requested

Funds are requested for the development of a farmers market facility as part of the overall development of the Big Glades Square site. The Square is an element of a larger central business revitalization project and will be a multi-use public gathering facility and will include an outdoor stage and amphitheater for outdoor concerts and production as well as vendor spaces for the farmers market and added vendor spaces during downtown festivals.

Total project cost is \$1,534,917. Other funds include: \$770,000 DHCD for downtown revitalization construction, contractual, and micro-loan programs (awarded); \$99,000 USDA Rural Development for construction (applied/under review – approval expected April 2010); \$532,117 Town of Wise for downtown revitalization acquisition, construction, and contractual expenses (committed); \$83,800 property/business owners for construction (committed).

Staff comments and recommendation: The bulk of matching funds are for the larger downtown revitalization project and not specifically limited to the farmers market project. There is no track record of a market from previous years, and a Farm Bureau direct marketing study attached to the application suggests establishing a temporary market to test demand from buyers and interest from vendors. TICR staff concurs with that approach to demonstrate interest and growth potential for the market. **Staff recommends no award. ■**