

**Department of Agriculture, Trade and Consumer Protection  
ADD Grant Project Economic Impact Survey**

Grant Contract #: \_\_\_\_\_

**Department of Agriculture, Trade and Consumer Protection  
Division of Agricultural Development  
Agricultural Development & Diversification Program (ADD)  
Grant Project Final Report**

Contract Number: **17048-UW Project 133-FF21**

Grant Project Title: **Developing Soil Amendment Products from Organic Residuals in Wisconsin's  
Fox River Valley Region**

Project Beginning Date: September 1, 2002

Project End Date: June 30, 2003

Amount of Funding Awarded: \$34,000

Name of Principal Contact Person: Leslie Cooperband

Address: University of Wisconsin, Dept. of Soil Science, 1525 Observatory Drive, Madison, WI 53706

E-Mail Address: lrcooperband@wisc.edu

WEB Address: [www.wastenot-organics.wisc.edu](http://www.wastenot-organics.wisc.edu)

Report Submitted on: September 13, 2003

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Please use the following questions as a guide for writing your grant project final report. In your final report, please answer each question as it relates to your grant project.

*1) What did you want to accomplish with the grant?*

The objective of the Fox River Valley Organic Recycling (FRVOR) project was to promote beneficial use of organic residuals from agricultural, agro-industrial and municipal sectors through development of agricultural and horticultural markets and soil amendment products. By creating public-private partnerships within the Fox River Valley region, we hoped to establish a cooperative business that would collect and process these organic residuals using composting and anaerobic digestion technologies to produce and market a diverse line of soil amendment products to regional end users. Our goals were 1) to have a fledgling business established by the end of the grant based on a cooperative model; 2) to develop a plan for constructing and managing a centrally-located composting facility and 3) to demonstrate that we could make consistent, high quality soil amendment products from FRVOR participant feedstocks (raw ingredients) that were acceptable to high end users like turf managers, greenhouse nursery growers and the WI Department of Transportation (WI DOT).

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2) *What steps did you take to reach your goal?*

The grant we received in 2002-03 was our second year of funding for this initiative. In the first year (2001-2002) we conducted a preliminary feasibility study. In this second year, we took the following steps to accomplish the above-stated goals: 1) we helped the FRVOR group develop a workable business structure that was compatible for all parties involved (City of Appleton, City of Green Bay, Green Bay Metropolitan Sewerage District, American Foods, Hillshire Farms-Sara Lee Corp. and Tinedale Farms), 2) we contracted an engineering consultant and a business development consultant to develop a detailed feasibility study and financial prospectus for a centrally-located composting facility and we co-authored their report to the FRVOR group, 3) we facilitated meetings between FRVOR participants and a commercial composter interested in building the composting facility and 4) we evaluated composts made from FRVOR participant feedstocks in greenhouse and field trials.

- *What worked?* The technical aspects of the project were a great success—composting of the FRVOR feedstocks and using these composts in greenhouse and field trials. In both cases, we demonstrated that there will be few technical barriers to producing high quality composts and soil amendment products, and that there are significant market opportunities to sell these products within the Fox River Valley area. We were also able to gain support of the WI Dept. of Natural Resources, despite our initial identification of regulatory barriers to blending diverse feedstocks. Our decision to hire consultants to develop preliminary market opportunities and financial feasibility along with designs for a composting facility was also a successful endeavor. The project garnered significant national recognition (Biocycle Magazine, invitations to present project findings at national meetings) and we were able to attract a potential composter from Iowa to consider constructing the centralized composting facility.
- *What did not work?* We invested significant time and human resources in Green Acres Landscaping to help them become the local, centralized composter and soil amendment marketer for the FRVOR project. Those efforts did not pay off due to unforeseen financial limitations of

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the company. The loss of a local, central composting site set the project momentum back and destroyed the fledgling market development activities that Phil Wells (FVROR Project Coordinator) had initiated. In addition, despite our progress towards producing a comprehensive working document that the FRVOR group could have used as a road map to establish a cooperative business and begin plans for constructing a composting facility, FRVOR participants we were unable to agree to form the business. Even though some of the participants had agreed to form the cooperative, the entire group never effectively took complete ownership of the concept and were unwilling to make the human and capital investments needed to move the concept forward. One of the major players, Agrilink Foods, went out of business, and another, American Foods was distracted from the project by their construction of a new facility in Iowa.

- *What would you do differently?* We would try to understand more comprehensively the motivations and perceived barriers of all the parties involved in the FRVOR group. The FRVOR group participants represent very diverse ways of doing business and ways of thinking— Departments of Public Works have different drivers than Wastewater Divisions or Sewerage Districts, large dairy farms have different needs than food processors, food processors have different degrees of urgency in solving their waste management problems, etc. We would also try to ensure ownership of the project from an earlier stage. We would more thoroughly investigate the financial condition of any of the participants that were taking a lead role to ensure that they had the financial capability and commitment to deliver on promises.
- *What were you able to accomplish?* We were able to work effectively with the hired consultants to produce a comprehensive document that the FRVOR group could use to make decisions about cooperative business creation and financial investment in a centralized composting facility. We kept the FRVOR group interested in the project and add new members to the group (City of Green Bay and Green Bay Metropolitan Sewerage District). We attracted an outside investor to consider investing and constructing a composting facility in the Fox River

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Valley area (still under consideration). We demonstrated the feasibility of producing high quality composts (7 different compost recipes). We demonstrated that FRVOR yard debris compost was an effective alternative for establishing vegetation on a DOT highway construction project. We demonstrated that all FRVOR composts could be used successfully to grow greenhouse crops, and convinced a very large commercial greenhouse grower (Natural Beauty Growers, Denmark WI) to set up a replicated trial using all of the FRVOR composts to grow several varieties of bedding plants (flowers and vegetables).

- 3) *What challenges did you face?* Convincing the FRVOR group participants to work together in a business; overcoming perceptions that these “waste” materials can be converted into valuable products with viable markets.
- 4) *What do you plan to do in the future as a result of this project?* Continue to work with some of the FRVOR group members who are still interested in establishing a cooperative business and building a small-scale composting facility in the area. Continue to promote the use of composts and compost-derived soil amendment products to end users like nursery growers, turf managers and WI DOT. Continue to promote the concept of collectively processing diverse organic waste streams.
- 5) *How should the agricultural industry or the State of Wisconsin use the results from your grant project?* The project can serve as a model for other regions of the state. The concept of creating public-private partnerships to solve waste management problems collectively should have appeal to livestock producers, food processors, municipalities and other industries in WI. For example, it could be used to create a cooperative business for collective composting of livestock manures within regions that have too much manure and insufficient land base for proper land application of raw manure.