**Live Green Loan Fund – Project Proposal**

**Project Background:**

During the 2009-2010 academic year 8,627 students will dine seven days a week, two-three meals a day, at one of five Iowa State University Dining Centers. In ensuring students are provided with a variety of fresh and made-to-order menu items, on-site preparation is commonplace. In addition, in striving to provide students with an environment in which they feel compelled to make their mealtimes opportunities for socializing and making connections with their fellow peers, on-site consumption is also a common occurrence.

As a result of a food system that offers this attention to detail, ISU Dining finds itself disposing of approximately 600 tons of pre- and post-consumer food waste each academic year. Dining staff have worked diligently to identify and explore various means by which to reduce food waste. To that end, efforts, including student-directed research and initiatives, such as waste itemization and analysis (through hands-on waste sorts), viability and feasibility of trayless dining, and food waste reduction and minimization educational and awareness campaigns have been completed and are ongoing.

Currently food waste is disposed of by two means – pulverizing and disposing through a garbage disposal system and landfilling. In addition to a concern over the sheer volume of waste food produced annually, the City of Ames also recently provided notice to Iowa State University of “above threshold” levels of solids from Union Drive Marketplace Dining Center (UDM) being discharged to the City’s water treatment plant. At these levels, the City of Ames has provided notice that a monthly surcharge will be assessed to ISU Dining, totaling approximately $9,000/year.

UDM generates approximately 35% of the total food waste of the five dining centers. Implementing a solution to eliminate the food waste at UDM, will result in a significant reduction in waste solids being sent through the water treatment plant as well as to the landfill.

**Project Description; Project # LG0007 Union Drive Marketplace:**

This project involves the installation of equipment and procedures to collect pre- and post-consumer food waste, specifically at UDM, in order to divert it from the landfill and the water treatment plant. The project will begin with a full-scale investigation of a variety of equipment and procedural solutions that could be implemented; the UDM facility and its opportunities and challenges as related to each solution; and the overall resources (funding, staff, space, transportation, etc.) that are available in order to support a particular solution.

Diversion of food waste through composting has already been determined as a priority and plans are underway to begin composting during the 09 fall semester. All collected materials will be taken to ISU’s Compost Facility. Determining the most effective and appropriate methodology as related to consolidating food waste for composting (i.e. pulverizing food waste via a pulper to minimize the transportation and composting of liquids and bulky materials or off-line sorting into collection containers with no additional manipulation of the food waste) is a primary focus of this project.

Efficiency and effectiveness of this process and the implemented systems and procedures will be continually monitored throughout this project with the intent of expanding composting efforts to all five Dining Centers as well as all campus dining locations.

**Project Contact:** Nancy Levandowski 515-294-7578 or Mark Huss 515-294-6111

**Project Return on Investment:**

Project costs are estimated at $50,000 - $100,000. A $50,000 loan is requested. Expected annual savings equals $9,000/year with a payback period of 5 years and a realized savings period of 5.5 years.

**Live Green Loan Fund – Project Profile**

**Union Drive Marketplace**

**Applicant**

Name/Contact Info: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Project Name/Location: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

****

**Project Outcomes:**

In addition to the annual budget savings for ISU and Iowa taxpayers, this project serves as a demonstration project that can be disseminated throughout Iowa State University dining facilities as well as dining establishments and programs in the Ames community. Once a template evaluation and checklist process can be completed and verified, food waste diversion solutions can be considered for other dining locations around campus.

As well as gleaning tangible landfill and water treatment cost savings of the direct impact of diverting food waste, savings is also realized through the reduction in the purchase of topsoil and soil amendment materials due to the resulting material that the composted food waste will generate. In essence, a closed-loop, cradle-to-cradle system of reinventing our own waste into a viable, necessary, and valuable commodity, is being created.

This project is one that not only demonstrates leadership in operations and waste management, but also in awareness and education as related to students, faculty, staff, alumni, grantors, donors, and ISU’s community and professional peers and partners throughout the US and around the world.

**Confirmation of Due Diligence:**

Technical and financial viability is considered satisfactory for the scope of this project.

Required signatures for project administrative approval have been received (see attached application signature page).

**Funding Recommendation by Live Green Loan Fund Committee:**

$45,000

In compliance with 5 year payback period requirement (based on realized cost savings), loan amount that may be offered is $45,000, rather than $50,000.

**Recommended Action by Live Green Loan Fund Committee:**

Project approval by President and signature of attached Funding Agreement.

**On Behalf of the Live Green Loan Fund Committee**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Director of Sustainability Date