

Florida Organics Recycling Center for Excellence – FORCE

Year Six Operating Plan

The Florida Organics Recycling Center for Excellence (FORCE) represents a cooperative effort involving the Florida Department of Environmental Protection (DEP), Sumter County, and the private and public researchers, including, but not limited to the University of Florida's Institute of Food and Agricultural Sciences (UF/IFAS). Organics represents a highly recyclable portion of the state's waste stream. The need for environmentally sound, economically feasible methods, and practical and applicable solutions for recycling and utilizing organics, and agricultural wastes throughout Florida will be addressed through this project. FORCE will execute numerous organics research projects, and the partnership with UF/IFAS and Technical Advisory Group (TAG) industry representatives, as well as other appropriate organic industries, institutions, and organizations, will offer an ideal combination of practical experience, research capability, and public education resources.

The following outline represents the proposed tasks for **Year Six** and the contributions by the program partners listed in the attached project budget.

1. Design

- 1.1. Engineering, planning, construction and inspection for in-vessel digester
 - 1.1.1. None is anticipated.
- 1.2. Plan certification and permitting for in-vessel digester
 - 1.2.1. None is anticipated.

2. Construction

- 2.1. Office space/laboratory
 - 2.1.1. Occupy and utilize modular office space and primary modular laboratory located with the office as appropriate.
 - 2.1.2. A secondary/satellite laboratory location in the County modular office next to digester will continued to be utilized.
- 2.2. Demonstration farm site preparation
 - 2.2.1. Complete existing and expand farm plot area as necessary or utilize site as needed for potential research and demonstration projects to be funded.
- 2.3. Installation and maintenance of digester
 - 2.3.1. Maintain appropriate construction and operating permitting documents with DEP.
 - 2.3.2. Procure any additional digester or facility ancillary equipment/construction to enhance research and demonstration activities as needed as long as local DEP regulatory requirements and economic barriers do not preclude this activity from occurring.

2.4. Laboratory

- 2.4.1. Primary laboratory area in FORCE modular office/lab will be utilized for some testing as well as for storage of laboratory supplies and equipment.
- 2.4.2. Purchase any lab equipment for the primary and secondary laboratory (located next to the digester) space where general organics FORCE R&D research laboratory work will need to occur relative to producing a quality compost product and monitoring feedstock activity. All SAC and DEP environmental testing will be done by a certified laboratory - Test America.

2.5. Irrigation system

- 2.5.1. Provide necessary expansion for 40-acre demonstration farm as needed.
- 2.5.2. Maintain and enhance irrigation system for proper operation.

3. Operation

3.1. Process technology procurement and testing

- 3.1.1. Update Technology Database vendor equipment information on the FORCE website as necessary.
- 3.1.2. Ongoing posting of technology vendor contact information on website.
- 3.1.3. Ongoing maintenance of hardcopy Organics Technology Library at FORCE for research use by the private and public sector.
- 3.1.4. Ongoing partnership with research partners to utilize in-kind equipment donated to FORCE in Year 3.
 - 3.1.4.1. WEMI In-vessel system donated by Alachua County to University of Florida Stadium.
 - 3.1.4.2. Utilize Earth Tub equipment with local high school DECA or FFA program.
- 3.1.5. If appropriate and local regulatory requirements change, test technology and provide results for publication, presentation, training, and FORCE website posting.

3.2. Feedstock procurement and processing

- 3.2.1. Maintain appropriate permitting documents with DEP.
- 3.2.2. Operate the FORCE in-vessel digester, as appropriate, for research projects, demonstration, and feedstock testing.
- 3.2.3. Maintain and monitor digester during usage for FORCE projects.
- 3.2.4. Identify and determine processing requirements for projects.
- 3.2.5. Initiate acquisition as appropriate for both in-kind and purchased feedstock.
- 3.2.6. FORCE Feedstock Transportation (pick-up and delivery): Public Works Staff (utilize funds to pay for Public Works Road & Bridge Department transport and staffing costs for feedstock to and from the FORCE facility).

3.3. Administrative costs, supplies, and travel

- 3.3.1. Digester electrical charges.
- 3.3.2. Miscellaneous Office Expenses (telephone, electric, and internet)
- 3.3.3. Attend conferences, workshops, training, and meetings.
 - 3.3.3.1. Recycle Florida Today Organics Committee Conferences & Meetings.

- 3.3.3.2. United States Composting Council (USCC) Conferences & Meetings.
- 3.3.3.3. Other organic/industry training workshops and conferences as appropriate.
- 3.3.3.4. Purchase appropriate administrative supplies.

4. Market Development, Education, and Training

- 4.1. Educational analysis, outreach and website
 - 4.1.1. Continue ongoing education and outreach plan.
 - 4.1.1.1. Withlacoochee Regional Water Authority – West Central FL Agricultural Center Grant Partnership (Education/Outreach).
 - 4.1.1.2. Focus on localized as well as statewide education needs and host annual workshop in partnership with Recycle Florida Today Organics Committee and SWANA Florida Sunshine Chapter.
 - 4.1.1.2.1. Research potential for subcontracting necessary educational materials.
 - 4.1.1.2.2. Obtain association approval of the end-user compost lists.
 - 4.1.1.2.3. Partner with the local, state, and national associations on organics initiatives were applicable.
 - 4.1.2. Continue to identify and document composting education sources and outlets in the state and nationally.
 - 4.1.3. Identify types of education material necessary for industry usage and integration.
 - 4.1.4. Review and approve appropriate TAG education materials to assist end-user marketing promotion and increase usage of organics products.
 - 4.1.4.1. Develop additional organics educational materials for appropriate industries.
 - 4.1.5. Identify distribution channels in Florida for disseminating educational material to appropriate target audiences (e.g. TAG industry represented markets such as the Florida Nurserymen and Growers Association & the Florida Poultry Federation).
 - 4.1.6. Ongoing development and marketing of education material.
 - 4.1.7. Provide bibliography, and continue maintenance of it, for the FORCE website.
 - 4.1.8. Finalize significant updates and revisions to the FORCE website as needed.
 - 4.1.9. Organize and conduct appropriate field days, workshops, or training programs as educational channels are developed for respective industry sectors (e.g. animal carcasses {from natural disasters} and manure).
 - 4.1.10. Maintain partnerships to leverage education, marketing and training events with industry organizations such as:
 - 4.1.10.1. Technical Advisory Group (TAG)
 - 4.1.10.2. Recycle Florida Today Organics Committee (RFT)
 - 4.1.10.3. United States Composting Council (USCC)
 - 4.1.10.4. Solid Waste Association of North America (SWANA) Florida Chapter
- 4.2. Technical Advisory Group (TAG)
 - 4.2.1. Conduct annual TAG meeting.
 - 4.2.2. Evaluate TAG participation and TAG categories and update accordingly regarding participation and attendance.
 - 4.2.3. Notify TAG of FORCE activities as appropriate.

- 4.2.4. Request and receive recommendations from TAG members on appropriate project activities, industry marketing efforts and education needs, in their field of expertise.
- 4.2.5. Distribute appropriate project documents to TAG members.
- 4.3. Market Development
 - 4.3.1. Continue Year 3 of Dr. Don Rockwood’s Forestry Project – University of Florida/IFAS.
 - 4.3.2. DOT-FORCE research project to improve the use of compost and mulch use by DOT staff, including but not limited to, removing plastic from mulch and glass from compost.
 - 4.3.3. Compost/mulch/water conservation landscape project for a LEED Certified Building in the City of Tallahassee, Florida.
 - 4.3.4. Enlist the technical assistance and scientific expertise of a state recognized, retired professor/researcher in Florida with a background in Organics for work on a multi-state outreach project spearheaded by Texas A&M University.
 - 4.3.5. Finalize any Year 5 R&D project not yet completed (e.g. Earth Tub and Wright Environmental technologies)
 - 4.3.6. Identify and document market opportunities with TAG Industry Representatives.
 - 4.3.7. Target and document specific industry composting opportunities to expand Florida’s organics markets.
 - 4.3.8. Partner with industry organizations and other appropriate entities (RFT, USCC, SWANA) to develop markets.
- 4.4. Conferences and meetings
 - 4.4.1. Present the FORCE project at conference(s) such as RFT, USCC, SWANA, Biocycle, & National Recycling Coalition (NRC).
 - 4.4.2. Participate in organizational association meetings to promote FORCE.
 - 4.4.3. Identify appropriate organizations to target organics information, including but not limited to, the citrus, golf, nurserymen, foliage, farmers, and poultry industries.
- 4.5. Demonstration farm operations
 - 4.5.1. Continue UF/IFAS Forestry Project until March 2007.
 - 4.5.2. Where applicable, engage industry partners to provide in-kind donation of farm plot materials, irrigation, seeds, plantings, and equipment.
 - 4.5.3. Install and monitor demonstrations as appropriate.

5. Evaluation, Monitoring and Testing

- 5.1. Scientific Advisory Committee (SAC) protocol development.
 - 5.1.1. The SAC met their charge by developing a protocol. This protocol had yet to be implemented in prior years because no other compost was produced than the FORCE digester compost. It is the intent of the County to implement it this year in conjunction with the research projects for the FORCE digester listed in

Attachment B and the Testing Methods listed in Attachment D. If applicable, SAC member scientific technical assistance with FORCE project team for the research projects and methods listed in Attachment B and D.

5.1.1.1. Rufus Chaney, Ph.D., USDA, Maryland has agreed to provide support.

5.2. Feedstock and products testing

5.2.1. Implement and develop research protocol as necessary and use the laboratory as appropriate.

5.2.2. Enlist the technical assistance and scientific expertise of a state recognized, retired professor/researcher in Florida with a background in Organics.

5.3. Environmental monitoring

5.3.1. Continue ongoing discussions with DEP staff regarding limitations/barriers encountered by the County and industry, review SAC monitoring protocol, and implement the monitoring protocol.

6. Project Management

6.1. Personnel

6.1.1. FORCE Directors: Sandra Howell, Assistant County Administrator and Mitch Kessler, Kessler Consulting, Inc.

6.1.2. FORCE Superintendent: Jackey Jackson, Assistant Public Works Director/Solid Waste, Recycling, and Composting Facility (training from FORCE funds).

6.1.3. FORCE Specialist: Stacie Stokes (80% salary reimbursement/training from FORCE funds).

6.1.4. FORCE Digester Operator: Jimmy Wise (35% of salary from FORCE funds).

6.1.5. FORCE Feedstock Transportation Staffing Support: Public Works Staff (utilize funds to pay for Public Works Road & Bridge Department regarding transporting feedstock to and from the FORCE facility).

6.1.6. FORCE Technical Consultant: Miriam Zimms, Kessler Consulting, Inc.

6.2. Administration Fees

6.2.1. Indirect Costs, as billed, when appropriate (relates to Year 1, 2 and 3 relationship with the UF/IFAS).

6.3. Annual work plans and budgets

6.3.1. Prepare quarterly reports, appropriate forms, and reimbursement requests.

6.3.2. Develop annual workplans and budgets.

6.3.2.1 Prepare all necessary annual reports and appropriate deliverable attachments for previous year.

6.4. Manage R&D organics research, education, and demonstration projects and budget awards that are spread over several tasks (e.g. 1.0, 2.0, 3.0, 4.0, 5.0 and 6.0).

- 6.5. Project Coordination and Contract Administration by County Consultant
 - 6.5.1. County Consultant performs project management Co-director duties as requested by FORCE Director.
 - 6.5.2. Act as Contract Administrator and Project Consultant for FORCE Director and Grantee, Sumter County.
 - 6.5.3. Perform contract administration and project coordination functions in conjunction with the FORCE Director and Sumter County staff.
 - 6.5.4. Assist FORCE Directors with management of FORCE staff, research and demonstration projects, DEP, technology evaluation, marketing, education, and operations, etc.
 - 6.5.5. Ongoing management of county engineering and groundwater issues relative to the FORCE compost digester permit.
 - 6.5.6. Interface with and train FORCE staff (6.1) as necessary and as requested by FORCE Directors.
 - 6.5.7. Work with FORCE staff to maintain and update technical and educational data for FORCE website.
 - 6.5.8. Coordinate and manage project meetings, deliverables and project tasks.
 - 6.5.9. Facilitate project communication with TAG, SAC, private and public sector and industry organizations as requested by FORCE Director.
 - 6.5.10. Prepare and distribute all necessary project reporting and invoicing documents.
 - 6.5.11. Any additional project assistance as requested by FORCE Director.
 - 6.5.12. Obtain Additional Funding: additional funding obtained from DOT in December 2005 (Year 5); project to be initiated and FORCE to provide matching funds in Years 5 and 6.