

**2004-05 INNOVATIVE GRANT APPLICATION FORM**

**PROJECT INFORMATION**

- 1) **Applicant Name:** Town of Surfside, Florida
- 2) **Primary contact person:** Eduardo Rodriguez, Town Manager
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- 4) **Telephone Number(s) (including SunCom number):** (305) 861-4863
- 5) **E-mail address:**
- 6) **Project Title:** Back Yard Composting Education Program
- 7) **Grant Request Amount:** \$5,000
- 8) **Length of project (months):** 12 months

\_\_\_\_\_  
Authorizing Signature

\_\_\_\_\_  
Title

## **PROJECT ABSTRACT**

The Town of Surfside is a small coastal community (pop. 5,000) located in south Florida. The Town estimates that yard trash comprises approximately 25% of its residential waste stream. Yard trash, as defined in Chapter 62-701.200 FAC, is generally comprised of “vegetative matter resulting from landscaping maintenance or land clearing operations and includes materials such as tree and shrub trimmings, grass clippings, palm fronds, trees and tree stumps. Because yard trash can be a valuable resource to the Town and its residents, the Town initiated a backyard compost demonstration project to assess the technical and financial feasibility of promoting backyard composting to its residents. The project goals include:

- Resource conservation;
- Environmental stewardship; and
- Environmental compliance.

Based on the success of the demonstration project over the past 12 months, the Town is interested in implementing a community-wide backyard compost program. The Town, with the financial support of the Florida Department of Environmental Protection (FDEP), plans to provide subsidized compost bins and training to its residents. The program would be based on a model that has been successfully implemented in communities throughout the United States. The Surfside project can then serve as a reference project for other Florida communities that are interested in managing yard trash at home.

## **PROJECT DESCRIPTION**

**Background:** Yard trash is ubiquitous in Florida. Many Florida cities and counties have developed or have access to commercial yard trash management programs. Many of these programs have the guidance, supervision, and support of FDEP. Local level programs, namely at the homeowner level, can similarly benefit from FDEP support.

More than a year ago, Town leaders and a group of concerned citizens decided to explore opportunities to utilize yard trash as a community resource. Yard trash is estimated to comprise approximately 25% of its single-family residential waste stream. A backyard compost demonstration project was developed to assess the technical and financial feasibility of a town-wide backyard compost program to manage yard trash. Some key considerations included ease of use, cost, odors, and vector attraction. What followed was the development of a citizen-funded backyard compost demonstration project.

**Project Summary:** Based on the success of the demonstration project over the past 12 months, the Town plans to implement a Town-wide backyard compost program to manage and reuse yard trash. The project objectives include:

- **Resource conservation** – using materials to the highest and best use to diminish our reliance on natural resources;
- **Environmental stewardship** – protecting the quality of the air, water, land and other natural resources by minimizing our impacts on our environment; and
- **Environmental compliance** – ensuring that yard trash is not commingled with municipal solid waste and disposed of in a Class I landfill.

The Town, with the financial support of FDEP, plans to provide subsidized compost bins and training to its residents. The Town will model its program on similar community-based programs, such as those in use in San Jose, CA and Ithaca, NY, as well as many others. Just as education is critical to the success in the reference communities, it will also be central to Surfside's program. The proposed program can be divided into three distinct tasks:

- **Task 1 – Promotion:** Surfside will promote the backyard compost program in its monthly Town Gazette, post resources on its website, and submit stories and ideas to local press. The promotion will include background information about the program as well information related to the compost education day and bin sale.
- **Task 2 – Subsidized Bin Sale:** Surfside will host a compost education day at its community center. At this event, residents will be able to purchase a subsidized compost bin, provided that they also participate in a structured training session.
- **Task 3 – Compost Training:** The training session will be based on the Master Composting curriculum. An emphasis will be placed on explaining the goals and objectives of the program, the compost process, and uses for compost. Compost reference materials, such as handouts, will be made available to each participant. Volunteers will be utilized to provide ongoing support to the program participants.

Educating and empowering residents will achieve the project objectives of environmental compliance, environmental stewardship, and resource conservation. Keeping yard trash out of the municipal solid waste stream will ensure environmental compliance FDEP regulations. Further, utilizing yard trash to produce mulch or compost is the epitome of environmental stewardship. Lastly, by using mulch or compost at home, valuable resources such as water can be conserved.

At the conclusion of the project, the Town will compile a summary report to identify the successes and challenges of the program. Town representatives will also present the finding to the Florida League of Cities to promote the program, and to provide the tools to replicate the program in their communities.

## **TECHNOLOGIES**

**Not in common use in Florida:** While home composting occurs throughout Florida, examples of town-sponsored programs are uncommon. Data from FDEP supports this understanding. Some notable exceptions include Sarasota and Charlotte Counties. However, the project proposed herein relates specifically to a small community that will utilize civic leaders to coordinate and manage the day-to-day activities. Further, anecdotal information gathered from the Town officials and local garden clubs indicates that while there is an interest, most Surfside residents are not composting. Potential supporters include local garden clubs, schools, and private landscape firms.

**Novel application of an existing technology or process:** Composting dates back thousands of years, so there is nothing new or novel about composting. However, based on the demographics of Surfside, the use of the Smith and Hawken “Biostack” compost bin (shown below) is ideally suited for users both young and old. The compost bin, which has a capacity of ½ cubic yard, is designed to be stackable, which facilitates building a compost pile, as well as turning. A critical component of the demonstration project was to determine a single compost bin that has the “best” combination of factors that included, durability, cost, ability to keep out rodents, and ease of use.



**Overcoming obstacles to recycling/waste reduction in new or innovative ways:** The greatest obstacles to backyard composting result from a lack of understanding. This lack of understanding relates to the value of yard trash, the process of producing compost, the value of compost, the impact of yard trash disposal. This program creates an opportunity to work cooperatively with homeowners, by subsidizing compost bins and providing compost education. The lessons learned from similar programs nationwide include targeting the citizens that want to compost, making it easy to compost, making it inexpensive to compost, and providing the requisite education. While this approach is not new, it has not been widely applied in Florida.

## **TARGETS**

Composting yard trash can help extend capacity in Class I landfills. Currently yard trash disposal is limited to Class III landfills, but it is often commingled with the municipal solid waste stream and disposed in Class I landfills. This practice is common, but it is possible to reduce the likelihood through education and supporting alternative waste management practices, such as back yard composting. As you are aware, it's been many years since a new Class I landfill was permitted in Florida. So, any opportunity to beneficially use a material that is wasting critical landfill airspace is worth consideration. By way of example, ff even 100 residents participate in this proposed program, the net effect would be the diversion of more than 40 tons of yard trash. While the effect of one community is slight, the cumulative effect over the long-term, if this program is transferred to other communities could be significant.

## **BENEFITS**

**Environmental Benefits:** This program would yield the following environmental benefits:

*Resource Conservation:* This program seeks to educate homeowners about the benefits of composting. Key amongst the benefits is the value of compost to the soil. It improves the quality of the soil and water holding capabilities, to name a few benefits. Through the use of compost as a soil amendment in the sandy soils that predominate this community, it will reduce the need to fertilize plants, as well as reduce the quantity of water required.

*Environmental Stewardship:* By managing yard trash at home through composting and using the compost and/or mulch onsite, Surfside homeowners will be by definition positive environmental stewards. Further, much concern has been raised over the fate of lawn chemicals through the composting process. Most research has indicated that the composting process reduces the toxicity of fertilizers and other chemicals. By managing yard trash at home and using the compost instead of, or to reduce reliance on lawn chemicals, this program reduces the opportunity to introduce foreign chemicals into the municipal solid waste stream.

*Source Reduction/Environmental Compliance:* Surfside is committed to developing a program that empowers its homeowners to manage yard trash generated on-site, thus keep those materials from the municipal solid waste stream. The program will target yard trash to separate it from the regularly collected municipal solid waste stream. Further, by separating yard trash Surfside will ensure that it is in environmental compliance with regard to disposal of its municipal solid waste stream.

**Economic Benefits:** The primary economic benefit of this project relate to the homeowners, as the grant funding would be used to subsidize compost bins. The goal is to reduce the barriers to home composting, such as the cost of the compost bin and the lack of knowledge. A secondary economic benefit relates to conservation of landfill capacity. While disposal costs are relatively low today, it is likely that any future disposal options will be significantly more expensive. Thus, any economic benefits today will greatly benefit waste generators in the future.

**Cost Effectiveness:** The cost effectiveness of the proposed program is best measured over the long-term. The goal is to meet resident demand for home-based waste management solutions, while also changing public attitudes towards wasting. In the near term, diverting yard waste from the municipal solid waste stream will help to reduce disposal costs, while providing an enhanced service to residential customers. Through a grant of \$5,000, it is projected that more than 100 compost bins can be sold at a cost of \$20. This cost represents a discount of 75% from retail (50% from wholesale).

It is envisioned that the FDEP grant money would be required only during the first year of the program. Based upon the success, it is likely that the Town would provide any future subsidies, and money required for ongoing promotion, training, and other customer support.

## **TRANSFERABILITY**

**Transferability of technology and processes:** Most, if not all Florida communities face similar waste management challenges to Surfside. Whether it is not having access to a commercial yard trash composting operation, or that di minimis quantities of yard trash are commingled with the municipal solid waste stream, this program can be a valuable component of any communities integrated solid waste management program.

**How project will promote transferability:** As stated above, the Town leaders will present the findings of the program to the Florida League of Cities, as well as place articles in local papers, and possibly national solid waste management publications. Further, Surfside will work collaboratively with FDEP to build upon the home composting awareness that is already being promoted.

## **LOCAL SUPPORT**

Surfside will provide a 20% cash match (\$1,000) and a 80% in-kind match (\$4,000). The money and services will be used for promoting the program, subsidizing compost bins, and education. Local promotion will include information in the monthly Surfside newsletter and website, as well as placing articles in local press. The compost bin sale, including compost training, will occur at the Surfside community center, to coincide with Baynanza – a County-wide beach cleanup event. Ongoing support will be provided via telephone, and onsite visits by local volunteers, such as residents and members of the local garden clubs.

**BUDGET**

The project budget will be allocated as specified below:

Task	Categories			Local Match		Total Grant Request
	Equipment	Supplies	Total Budget	In-Kind Match	Cash Match	
Promotion				\$500	\$250	
Subsidized Bin Sale	\$4,500	\$500	\$5,000	\$1,000		
Public Education				\$2,500	\$750	
<b><i>TOTAL</i></b>	<b><i>\$4,000</i></b>	<b><i>\$500</i></b>	<b><i>\$5,000</i></b>	<b><i>\$4,000</i></b>	<b><i>\$1,000</i></b>	<b><i>\$5,000</i></b>
<b><i>Percentage Match</i></b>						<b><i>100%</i></b>

As presented above, the FDEP grant money would be used for the subsidized bin sale. Surfside would provide a combination of cash and in-kind resources to support activities related to promotion, the subsidized bin sale, and public education.