Evaluation of the Cocoa Beach Green Business Program

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The Cocoa Beach Green Business (CBGB) Program is an environmental education and social marketing effort that targets three business types in Cocoa Beach, Florida: lawn care services, restaurants, and home improvement contractors. The CBGB program tests whether participants will be motivated to implement environmentally responsible business practices due to economic benefits like increased advertising and consumer support, social incentives like community and peer respect, personal satisfaction of protecting a natural resource that they depend on for recreation and quality of life, and increased knowledge of pollution prevention best management practices. In essence, the program tests motivators and challenges to changing business behaviors. Evaluation explores whether small business owners will be motivated to change behavior in order to gain the reputation of good environmental citizenship, to increase business, or to protect the surface water feature that they depend on for quality of life. In this research, we examine both participating green businesses and consumers who may utilize the services of targeted businesses to determine the likelihood that businesses will participate in the program, that knowledge will increase, and information will result in behavior changes. We examine why businesses participate, the level of business commitment, values such as environmental attitude and place attachment, and consumer support to determine the likelihood for business behavior change.

The Cocoa Beach Green Business (CBGB) Program will be evaluated as part of a comprehensive Nonpoint Source Pollution Education Campaign that targets diverse audiences with effective outreach in order to reduce nonpoint source pollution. The comprehensive program goal is to assist state and federal agencies develop indicators and guidance for implementing successful nonpoint source pollution education programs. Clean Water Act Section 319 grant funding supports the evaluation of NPS education and outreach methods in order to recommend evaluable measures and performance indicators. Each pilot project evaluation will be utilized to guide future program planning by demonstrating proven strategies and measures for evaluating success. CBGB represents one example of implementing and testing nonpoint source pollution education methods.

The CBGB evaluation report examines the integral steps to evaluation planning including a needs assessment, program theory support, stakeholder analysis, service utilization plan, evaluation questions, realistic indicators, and methods for measuring success at reaching objectives that lead to long-term outcomes. The paper provides a summary of the service utilization evaluation. Contact Leesa Souto at Lsouto@mail.ucf.edu for the complete paper.

Cocoa Beach Green Business Program Theory

The CBGB program tests the theory that small businesses will be more likely to adopt practices that reduce nonpoint source pollution if they are motivated by place attachment and enhanced social license (or reputation). The program uses educational interventions to teach businesses the link between land-based activities and receiving water bodies – in this case the Indian River Lagoon and increase business knowledge of pollution prevention practices. The program uses promotional incentives to motivate business participation by increasing participant recognition; raising their social license; and attracting new customers. The program employs marketing tools like written pledges to commit business intentions, and prompts to remind employees to practice pollution prevention techniques. Finally, the program engages residents to support program participants through consumer choice and positive reinforcement. Implementation of a multi-faceted approach attempts to heighten the benefits of business participation (increase recognition, social license, and consumer support) while reducing the barriers to behavior change (too much trouble, no profitable gain, don't understand link between actions and water quality, forgetfulness).

The theory is supported by research which shows that businesses will go out of there way to meet the expectations of society and avoid activities that society deems unacceptable, (Gunningham et al, 2004); that place attachment can be a significant contributor to environmentally responsible behavior (Stedman, 2003; Vaske & Kobrin, 2001; Vorkinn & Riesse, 2001); and that community support and marketing tools like commitment and reminder prompts can successfully influence behavior change (McKenzie-Mohr, 1999). The CBGB Pilot Project implementation steps are as follows:

- 1: Identify targeted businesses by Standard Industry Cod (SIC) and identify best management practices criteria that define each industry type as a Green Business.
- 2: Engage participants in the program by committing them to read Green Business educational materials and to pledge to use prescribed pollution prevention techniques.
- 3: Promote participating businesses to residents using advertising media and promotions.
- 4: Promote consumer support for Green Businesses by collecting consumer behavioral information and targeting consumer messages.
- 5: Evaluate the effectiveness of reaching the target audiences and changing knowledge and attitude about NPS pollution Best Management Practices.

The CBGB pilot project will be implemented in a second pilot project area - Orlando, Florida - in 2006. One fundamental question that will be explored by comparing the two locations is transferability between communities so that a statewide effort can be implemented. The outcomes report for both pilot studies will include consumer survey data analysis, recommendations for transferability,

process evaluation comparing and contrasting the two locations, lessons learned, and recommendations for regional implementation. These outcomes will be packaged in a Green Business Toolbox that will also include digital files of customizable graphics, spreadsheets, statistics, and templates that can assist others interested in starting a similar program. The Comprehensive Green Business project goal is to do the legwork and research that will help others implement similar programs without "reinventing the wheel."

Location Demographics

Demographic and historical information demonstrate that Cocoa Beach is a small community that is completely built out and there is little area left for stormwater treatment or residential development. The people who originally settled in the area came in response to a need for technically skilled employees. The unretrofitted stormwater control system dumps polluted stormwater directly into the Indian River Lagoon, a receiving water body of significant value to the regional economy and listed as a national priority for protection. Cocoa Beach sits on a barrier island and is bordered by water on two sides, potentially uniting residents in an "island" mentality. Cocoa Beach has a water-oriented community culture, fostered by decades of water related commercial and residential activities. Demographic information clarifies that Cocoa Beach residents are highly educated, financially stable, homogeneous in racial composition, and many are retired. The city community culture and demographic make it a prime location to implement and test a community-based education and incentive initiative to accomplish this goal.

Direct Target Population

The CBGB program target population is area businesses that have the greatest potential to discharge pollutants into the Indian River Lagoon through regular business practices. To better understand the views and concerns of the target population, interviews were conducted with business representatives and a committee of business "champions" was assembled. The three primary targets - lawn maintenance businesses, painting contractors, and restaurants - were selected by their prevalence and population size, business diversity, and potential to change behavior based on input from local business interests. At project initiation, the target business population was 178 businesses; however hurricane impacts resulted in many business failures reducing the target business population by 33% to 121 businesses. Descriptions and population change information for each of the three targeted business audiences is presented below.

1) Lawn Maintenance – As of August 2005, there were twenty-seven (27) licensed, lawn maintenance businesses operating within Cocoa Beach. Thirteen percent (13%) of the original targeted restaurants went out of business since project planning initiated. Operation of these businesses is typically done out of a truck, with little employee training or continuing education. The challenges to reaching this target are 1) no "place" of employment, 2) no organized meetings or committees, 3) high turnover of staff, and 4) staff with low literacy rates and

language barriers. Additionally, many lawn services do not acquire city occupational licenses, potentially making them fearful of regulators, and unreachable through city databases. Homeowners, home & condominium associations, businesses, and governments may employ lawn maintenance services, providing another avenue for motivating behavior change. This audience perceives itself and is perceived by others to be "green" already and existing environmental efforts are targeting this industry.

- 2) Painting Contractors There were twelve (12) remaining licensed, painting contractors operating within Cocoa Beach, representing the business category hardest hit by hurricane impacts with 54% of painting and masonry contractors out of business. Operation of this business type is typically done on the road and is further complicated by the fact that General Contractors tend to be the primary employer. Challenges to reaching this target are 1) no office, 2) no need for continuing education or state licensing, 3) variable employers, and 4) little interaction with the public. This audience also has little interaction with regulators or public officials, except to receive their annual occupational license. As such, it is unlikely that painting and masonry contractors have been informed about nonpoint source pollution and pollution prevention methods. Other home improvement contractors have been added to this business group to increase potential audience size.
- 3) Restaurants There are eighty-two (82) restaurants operating within Cocoa Beach. Thirteen percent (13%) of the restaurant population went out of business since the hurricanes hit Cocoa Beach in September 2004. Restaurants as a business type are very diverse, ranging from high-scale dining establishments to convenience stores. The project targets stand-alone businesses that are primarily food serving establishments. This business type is the only one selected that can be reached at a stationary location and that usually holds staff meetings for information sharing. Challenges to reaching this audience include 1) high staff turnover, 2) late hours, and 3) language barriers. Because they must comply with health regulations, this audience may understand business activities that can potentially pollute surface waters.

Indirect Target Audience

Residents and consumers are important indirect targets, because they can motivate businesses to be environmentally responsible through monetary support and social license. Social license refers to "the degree to which a corporation and its activities meet the expectations of the local community, the wider society, and various constituency groups." Businesses are increasingly concerned about their community reputation, enhancing their social license, and preserving their "reputation capital", (Gunningham et al, 2004). The more residents are concerned about business activities harming their quality of life; the more they will be supportive of businesses that are acting as responsible environmental stewards. Participating businesses benefit from increased customer satisfaction as well as enhanced social license. Efforts to increase resident's awareness of the CBGB program also encourage residents to choose participating businesses.

Methodology

The CBGB evaluation team utilized qualitative and quantitative methods to collect information that would guide process and outcome evaluation. The team used interviews and focus groups to collect information on the materials and methods that would be used, to clarify participant satisfaction and needs, to better understand how and where businesses received information, and to identify the barriers and benefits to business behavioral change. Questionnaires and quantitative calculations measure awareness change, knowledge change, behavior change, numbers of products, and diversity of promotional advertisements, participation rates, and customer satisfaction. Each method for collecting evaluation information is discussed further in the following paragraphs.

Business Interviews

Prior to implementation, project leaders approached members of the targeted business community to request input and support for the program. These CBGB Business "Champions" helped develop realistic Best Management Practices for each business type, provided input on compliance issues and regulatory concerns, and acted as the leaders to recruit business involvement. In response, they were spotlighted in a four-page advertisement that was purchased in the Florida Today newspaper. Although the champions were partially motivated by the promotional opportunity, their advice and support proved invaluable to recruitment and implementation.

Field Notes

The project coordinator keeps a field notebook in which all field visits are documented and interviews are summarized. The field notes provide the measures for counted media items, numbers of employees, numbers of promotional materials posted, and locations of participating businesses.

Pre- and Post- CBGB Program Surveys

There are four sources of CBGB business participant and non-participant awareness and behavior data – the 1999 General Business Survey, the CBGB Kick-off Business Survey, the Registration Pledge Survey, the 2005 Consumer Telephone Survey, and the 2006 CBGB Participant Survey. The **1999 General Business Survey** is described in the needs assessment portion of the paper. This mail survey included nearly one hundred different types of Brevard County businesses and collected awareness information, concerns, and specific knowledge of terms used to describe pollution prevention practices. The terms include "Best Management Practices;" "Nonpoint Source Pollution;" and "Personal Pointless Pollution." The survey provides a baseline of general business knowledge and concern several years prior to project implementation.

A second source of prior business knowledge was collected by the CBGB project coordinator when the project initiated in 2004. The project coordinator contacted every targeted business via telephone, email, or mail and requested responses to a short business questionnaire, prior to informing them of the CBGB project. The **CBGB Kick-off Business Survey** served three purposes 1) to collect baseline

awareness measures; 2) to collect baseline subjective knowledge levels; and 3) to encourage business participation. The CBGB Kick-off Business Survey reinforced the general survey by inquiring about the same specific pollution prevention terms.

Twenty-six targeted businesses responded to the CBGB Kick-off Business Survey from all three targeted businesses, representing 28% of the total target audience. Survey responses to the questions regarding knowledge of terms are consistent with the responses from the 1999 General Business Survey, indicating little change in business knowledge of terms between 1999 and 2004. The results from the CBGB Kick-off Business Survey were used as the baseline to measure a change in awareness and subjective knowledge among participating businesses before and after project implementation.

A post-implementation survey was conducted via mail, when participating businesses submitted their commitment pledge to practice pollution prevention best management practices. The eight-question survey, referred to as the **Registration Pledge Survey**, was designed to compare business participants with the 1999 General Business Survey respondents as well as measure a change in participant awareness and knowledge from the CBGB Kick-off Business Survey. The survey includes questions that gauge the respondent's perception of stormwater runoff and water pollution problems in Cocoa Beach. Eighteen participating businesses returned the survey, representing 29% of the total CBGB business participants. Survey respondents indicated that 86% thought that Cocoa Beach has a water pollution problem, with 100% responding that protecting water resources was very important to their business.

Ninety-three percent (93%) of Registration Pledge Survey respondents thought that advertising their business, as "Environmentally Friendly" would increase business. This percentage is a sizable increase from the 1999 General Business Survey, which found 28% of respondents reporting that advertising their business as "Environmentally Friendly" would increase business. This indicates that businesses joining the CBGB effort are becoming involved, in part, due to their perceived promotional opportunities.

The comparison of the number of respondents that indicated that they already used green products showed little variation between the Registration Pledge Survey (73%) and the 1999 General Business Survey (63%). The higher percentage of Registration Pledge businesses reported to be using environmental products already may indicate that participating businesses are more environmentally concerned then the general business audience. This supports the theory of environmental action, which suggests that the first ones to act are those that are already environmentally concerned, followed by those that are somewhat concerned, and finally those not concerned at all. Once the tipping point of social norm change is reached, the trend that is established is sustained indefinitely. With enough business participation, the CBGB program should reach a tipping point where even the businesses that don't care about the environment will join due to social pressure and normative behavior.

The **2005** Consumer Survey conducted by the University of Central Florida Institute for Social and Behavior Science will be used to gauge the level of consumer commitment to environmental programs and how environmental attitude and behavior predict consumer support for green businesses. The 2005 Consumer Survey provides levels of CBGB awareness and analysis will attempt to identify what motivates people to be environmentally responsible. Thirdly, the survey will serve to motivate business participation by providing the salient data regarding consumer support and consumer action.

The 2005 Consumer Survey was conducted in four adjacent, central Florida counties: Brevard, Osceola, Orange and Seminole. An over sample of Cocoa Beach residents was used to collect representative information about the CBGB project. The Consumer Survey was a random dialing telephone survey of listed telephone customers in the noted counties. The survey used Computer Assisted Interviewing Techniques (CATI), allowing for scripted interviewing that results in greater reliability and reduced coding error. The phone numbers were randomly called between the hours of 3:00 pm and 9:00 pm during the week and 12:00 pm and 9:00 pm on weekends. All interviewers were trained in advance and the survey was conducted in both English and Spanish. A total of 714 surveys were completed out of 11, 718 call attempts, with 27 additional partially completed surveys. The number of incomplete surveys (or break offs) was 3.6%, one of the lowest rates experienced by the Institute (J. Wright, personal communication).

The most recent data on participating and non-participating businesses were collected through the **CBGB Participant Survey** during the summer of 2006. The survey was conducted on the telephone, in person, and by mail. Surveys were collected by contacting the participant contact or owner/manager of the targeted businesses in Cocoa Beach via telephone and asking them to participate in the survey. The businesses were given the option of taking the survey over the telephone or scheduling a time for the interviewers to conduct the survey in person. If the businesses were unable to be reached via telephone, they were visited by interviewers in person. Contact was attempted with approximately 100 businesses. Of those businesses, 50 completed the survey for a response rate of 50%. The survey was confidential and no incentive was offered to businesses for completing the survey.

The survey included measures related to environmental knowledge, attitudes, and actions; as well as questions related to businesses and their activities. All questions related to environmental knowledge, attitudes, and actions were asked of both participants and non-participants. Additionally, both participants and non-participants answered questions related to their businesses and where they had first heard of CBGB. Non-participating businesses responded to questions related to what type of information they received regarding the program. And participating businesses responded to questions relating to CBGB, overall satisfaction with the program, implementation of best management practices (BMPs), and involvement with program guidelines.

Service Delivery & Utilization

Examining the service delivery and utilization clarifies the complex nature of engaging the target audience. Service delivery outlines the procedures for reaching the target audiences and service utilization examines the path for businesses engagement. Together, service delivery and utilization evaluation confirm the success at reaching and engaging the target audiences.

The CBGB service delivery employs different methods to reach different audiences. CBGB information and registration forms are mailed to each targeted business, inserted into business occupational license renewal envelopes, and delivered in person to target businesses. Business walk-in visits targeted restaurants, the only business with a stationary location. To reach Cocoa Beach residents, program promotion included a post card mailed out to all residents, unique webpage on the City website, posters in public locations, newspaper advertisements, PSA commercials on the government television channel, and the CBGB information hotline.

An interested business must contact the CBGB Coordinator to sign-up and receive the **educational package** that includes a CBGB Pledge Form, the booklet entitled *Indian River Lagoon: Our Natural Resource*, a business-specific, Best Management Practice poster, and a pre-participation survey questionnaire. The education package materials instruct businesses to read the IRL booklet and BMP list, share them with their employees, commit to complying with the requirements of the BMPs, signing the pledge form, completing the Pledge Form Survey, and returning the pledge form and survey to the CBGB coordinator. All businesses that request an educational package are contacted by telephone to discuss questions and solicit their pledge submittal. Additional phone calls and/or visits may follow if a pledge form had not been received in a timely fashion.

Once a business has signed the pledge form, indicating that the owner has read and shared the instructional materials with personnel, the business receives a **promotional package** that includes a "I'm a Green Business" poster, CBGB stickers, a laminated Best Management Practices (BMP) list to post in the business, air freshener reminders for vehicles, and an invitation to the next City Commission meeting where participants are recognized as Cocoa Beach Green Businesses by the Mayor.

Green Business participants are advertised in monthly newspaper articles and listed on quarterly Green Business posters, the annual "Green Business Directory" mailed to residents, and on the CBGB website located at www.cityofcocoabeach.com/greenbusiness.htm.

Service utilization demonstrates that businesses must be pro-active in pursuing their participation in the program by requesting information and submitting the pledge form. Requiring their pro-active enrollment in advance can be both a hindrance to and an assurance of project goal achievement. Requiring that businesses request information and submit a pledge form may deter some

business owners from participating because it requires their time and postage. However, requiring these incremental behavior changes to enroll in the program may result in greater likelihood that businesses will proceed with the other requested behavior changes, thereby assuring that the participants enrolled are likely to incorporate pollution prevention BMPS. Project strategies assume that the burden of enrollment will outweigh the benefit of being a participant and furthermore, that once a business has committed to act, they are more likely to continue to act congruently. Requiring businesses to be pro-active from the beginning, initiates their action toward incorporating pollution prevention practices into their daily routine. Both service delivery and utilization can be evaluated by measuring indicators of promotional success, program awareness, customer satisfaction, and participation rates.

Service Utilization Questions & Measures

Service utilization questions measure the extent to which potential participants receive program services and their satisfaction with those services. Process evaluation questions determine whether the methods and strategies used to reach the project goals are effective. Finally, outcomes measure the potential for sustained behavior change, changes in knowledge and awareness, and project transferability.

Service Utilization Questions

The service utilization evaluation focuses on whether targeted businesses are receiving the program information, whether they are enrolling in the program, whether they are utilizing the programs materials, and whether they are adopting the prescribed best management practices. Indicators of successful target engagement include levels of CBGB program awareness; distribution of materials and promotional products in terms of numbers and diversity; customer satisfaction and participation rates; changes in awareness and knowledge, how customers learned about the program, and how vested participating businesses are with program objectives. Service utilization questions, indicators, and measurement methods are outlined in the following paragraphs.

Service Utilization Question #1: Are members of the target audiences aware of the CBGB program?

Method: Pre and post-survey of targeted businesses that ask awareness and subjective knowledge questions. 2005 Consumer Survey asking respondents in four counties if they heard of the Cocoa Beach Green Business Program and the 2006 Business participant survey asked targeted businesses how they heard of the program.

Measure 1: Percentage of target businesses aware of CBGB – 70-100%

At program kick-off in 2004, the CBGB Project Coordinator contacted every targeted business through a variety of methods. The coordinator telephoned each business, mailed them each an introductory letter; and personally visited every

targeted business location. Field notes demonstrate that every targeted business was notified of the project through at least two different methods. The project coordinator is kept apprised of new businesses by the City's occupational licensing bureau, and they are also contacted. From this, CBGB assumes that its entire direct target audience was aware of the service being delivered, at least that first year of implementation.

The CBGB participant survey conducted during the summer and fall 2006 tells another story. During this survey, thirty-eight percent (38%) of non-participating businesses indicated that receiving the survey was the first time they ever heard of the CBGB program. Only 14% of non-participating businesses remembered hearing about the program from a City employee or the CBGB project coordinator, while half (50%) of participating businesses respondents indicated that they heard about CBGB from this source. More information on where participants and non-participants recall hearing about the program are presented in following pages.

Measure 2: Percentage of local residents aware of the Cocoa Beach Green Business program – Brevard County – 12.9%; Cocoa Beach 23%. The measure of resident awareness is taken from the 2005 Consumer Survey conducted by UCF in September 2005. Any awareness of CBGB in Sept 2005 is assumed to be due to project implementation, as prior to implementation, CBGB did not exist and any knowledge reported would be dubious.

Considering the short timeframe for implementation and the dramatic hurricane impacts in the region, the CBGB project name is approaching a tipping point for name recognition. Tipping point refers to the percentage of a population that must know something before natural social activities will cause the information to reach a majority of the people. In comparison to other nonpoint source education efforts, the name recognition appears high. Only 19% of respondents in the 2005 Consumer Survey had heard of the Florida Yards & Neighborhood Program, a statewide landscaping education campaign that has been implemented for ten years.

Service Utilization Question # 2: Is the availability of project services such as enrollment and educational materials conveniently accessible to program participants?

Measure 1: The project printed over 10,500 copies of nine different media forms and distributed between 7% and 91% of each item. The media items used for broadcasting (flyers, booklets, business posters and air fresheners) were the items most distributed, as expected. The items for business consumption (CBGB and BMP posters) were shared more specifically with potential business interests, therefore fewer were distributed.

Measure 2: Response to 2005 Consumer Survey question, "Where did you hear of the Cocoa Beach Green Business Program?" confirms that Cocoa Beach residents are hearing about CBGB from project related methods. The highest

percentage of responses indicated they heard of CBGB from the newspaper or a newsletter (44%). The second highest response (20%) was that they heard about the program from a friend, coworker or family member, indicating that social diffusion of the message was occurring. The third highest response was the City website (12%). Thereafter, responses were program coordinator/city employee (9%); CBGB mailed flyer (6%); unsure (6%) and other (3%). Results confirm that project strategies are successfully reaching Cocoa Beach residents; that the message is compelling and understandable; and that are residents and businesses are communicating about the program.

Measure 3: 2006 CBGB Participant Survey question asked participating and non-participating business respondents where they had first heard of the CBGB program. Among participating businesses, 50% indicated that they had first heard of the program from the program coordinator or city employee. Other sources of program information consistent among participating and non-participating businesses are summarized as follows with data presented for participating businesses – non-participating businesses. Newspaper/newsletter (17% for both); friend/co-worker (10-11%); Flyer (6-7%); City Website (6% - 3%); CBGB poster (6% - 0%); and presentation (6% - 7%.) These data show the success of personal communications in committing individual actions.

Service Utilization Question #3: How satisfied are program participants with program materials and methods?

Method: 2006 CBGB Participant Survey

Measure: Participating business response to survey questions about reservations and satisfaction with program delivery and materials.

Overall, the majority of businesses (88%) indicated that they had no reservations about participating in the program. The majority of participating businesses indicated that they were "very satisfied" with the level of promotion (64%), the educational materials (71%), the staff responsiveness (87%), and the CBGB program overall (73%). The majority of participating businesses indicated that the main benefit of participating in the CBGB program was improving the environment. Most participating businesses indicated that the main reason they decided to participate in the program was due to environmental concerns and/or belief in the mission of CBGB.

Service Utilization Question #4: What percentage of the target population is participating?

Methods: Counting and calculating the percentages of targeted audience participation; the percentage of businesses that received commitment packages; and the number of non-targeted businesses enrolled in the program.

Measure 1: Thirty-five percent (35%) of lawn care providers; thirty-three (33%) of home improvement contractors and forty-three percent (43%) of

restaurants contacted the project coordinator to request the educational package that includes the IRL: Our Natural Resource booklet, the BMP list; the commitment pledge form, and the Registration Survey. Overall, thirty-seven percent (37%) of the target business population has pro-actively responded to request service delivery.

Measure 2: Business participation is measured as the percentage of the target businesses that enroll in the program by completing and returning the pledge form. 21% of targeted landscaping businesses, 25% of home improvement contractors, and 15% of restaurants have pledged to participate in the CBGB program. "Other" types of businesses that joined the program, yet were not targeted, include churches, retail chops, real estate offices, and mortgage companies. A large majority of participating businesses that responded to the CBGB Participant Survey indicated that they were both owned (72%) and managed/operated (89%) by the respondent or someone in their family. And, on average the participating businesses had been operating in Cocoa Beach for about 18 years.

Measure 3: The number of businesses that received educational packages and the number that pledge into the program differ. Overall, 37% of the targeted business audience requested materials, but only 20% returned the pledge form. There is a 14% difference in the number of landscapers receiving the educational package and enrolling in the program, an 8% difference in home improvement contractors, and a 28% difference in restaurants receiving packages and enrolling. This disparity may mean a couple of things; 1) that businesses read the materials and don't want to participate; 2) that businesses accept the package but never read the materials; or 3) that businesses receive the package, read the materials, and don't respond with a written pledge form. Further investigation will attempt to clarify the disconnect between business interest in the educational package and their active response to submit the pledge form required to register as a Cocoa Beach Green Business.

Conclusion

Achieving a change in behavior through an incentive-based education program requires a long-term commitment. Evaluation demonstrates successful engagement of target audiences as demonstrated by participation rates and awareness. Field notes and interviews with participating business indicate that those receptive to the project had a greater appreciation for water quality issues and more community ethics. Many cited they wanted to "do the right thing" for their community and realized the economic well being of the City of Cocoa Beach is intrinsically tied to the health of Lagoon system.

Lawn care business owners appeared keenly aware of general water quality issues in their area, with many stating they felt they were already doing many of the BMPs during their daily work routine; hence, they felt "green" prior to being approached. The Lawn Maintenance groups also have the potential to be motivated by external audiences such as client residents, homeowner and

condominium associations, and other businesses due to their diverse clientele. Their effects on the health of the system can also be widespread for the same reason. Challenges faced with reaching this group include the transient nature of the business and staff, possible language barriers, and no structured licensing or training requirements.

Painting contractors and other home improvement professionals were at the other end of the spectrum from the lawn care businesses. This group was the most difficult to contact and as a result, had the lowest percentage of targeted businesses requesting additional information. However, this audience was the most likely to return the pledge form after receiving the educational package. Similar barriers to effective outreach as identified with lawn care professionals were found with the home improvement group including the transient nature of the business and staff, little structured licensing and training requirements, and the lack of a business storefront. Initial interviews confirmed that business owners in this category did not see the link between their business practices and impacts to water quality degradation in Cocoa Beach.

The most diverse group, restaurants, had the advantage of a "brick and mortar" location; however, the establishments ranged from single operator storefronts to multiple location ownership businesses and national chain businesses. Successful CBGB partnerships were more apt to be with the small, local establishments – those that had long term commitments with the community as both business people and residents. Managers and employees who were contacted with large national chain businesses always referred CBGB promotional information to corporate headquarters, where local water quality issues are not a priority. As a result, no national chain businesses joined the CBGB effort. This supports the project assumption that place attachment and community value motivate business participation. Cultural differences and language barriers within this group are challenging, with many local small businesses ethnically owned and operated. Many feared the CBGB program would bring regulatory intrusion and additional expense to their businesses. Cocoa Beach restaurant owners seem well connected to each other and their participation is influenced by the participation of other restaurant owners.

The participation of untargeted businesses indicates that the CBGB Project message is diffusing through the community. Untargeted businesses heard about the project from personal contacts, newsprint and the City website. The untargeted businesses that joined the CBGB effort were already trying to be environmentally responsible in their business behavior and wanted the increased visibility of their environmental stewardship. This supports the assumption that businesses will join to increase their community reputation. A diverse group of untargeted businesses – a hair salon, real estate offices, electric contractor – all decided to join the CBGB effort in an attempt to "do the right thing" for their community.

All the CBGB participants are environmentally concerned, demonstrated by survey responses that indicate that more of them already use environmental

practices or products; that all participants believe that Cocoa Beach has a water pollution problem, and that most believe that their actions can make a difference in protecting surface waters. Several participating businesses have reportedly gone above and beyond what is required of them to take on additional pollution prevention techniques, such as cleaning storm drains along their route. One restaurant owner translated the BMP list into Chinese in order to inform his kitchen staff.

Cocoa Beach residents are important contributors to the project. By supporting participating businesses through recognition and consumerism, the residents provide a great incentive for business participation. On the other hand, Cocoa Beach residents are also the vigilant enforcers of the social license afforded by the program. Business participants are on the radar screen for resident complaints and as such, it is difficult to use business compliance as a measure of success. Public information about the program was distributed at City Hall, civic organizations, Public Libraries and the Cocoa Beach Country Club. One CBGB participant reported that she noticed increased customers after bring advertised as a CBGB participant, indicating that residents of Cocoa Beach were responding appropriately by supporting participating businesses.

The CBGB Evaluation will continue to analyze the likelihood that business behavior change will take place and that this can ultimately lead to a reduction in nonpoint source pollution. The next steps in CBGB program evaluation will collect the final participant information about self-reported behavior and knowledge and to analyze the 2005 Consumer Survey to better understand consumer support for environmentally responsible businesses. Thereafter, the outcomes of the CBGB evaluation will be compared with similar evaluation measures of the Orlando Green Business program to provide a comprehensive comparison and contrast of implementation success. Others interested in starting similar programs will benefit from the outcomes of both projects, which will be shared in the Green Business Toolbox that will combine lessons learned and implementation materials.

Process and Outcome evaluation questions, indicators, measures and methods are described in the full working paper which can be requested by contacting the author, Leesa Souto, at Lsouto@mail.ucf.edu. The CBGB evaluation will be completed in summer 2008.