

**PALM BEACH COUNTY
BOARD OF COUNTY COMMISSIONERS**

WORKSHOP SUMMARY

Meeting Date: September 22, 2009

Department: Administration

I. EXECUTIVE BRIEF

Title: Palm Beach County Green Task Force on Environmental Sustainability and Conservation Final Report


Summary: The Task Force has completed its work and will be summarizing its final report and recommendations in this workshop. Departmental reviews on the Task Force recommendations will also be presented to the Board. Questions, comments and direction from the Board of County Commissioners will be solicited. Countywide (GB)

Background and Policy Issues: The Palm Beach County Green Task Force on Environmental Sustainability and Conservation was created by the Board of County Commissioners on June 3, 2009, to identify actions and policies that can be implemented by the County to encourage healthier, more resource efficient and sustainable buildings, energy and natural resources conservation, and environmental sustainability. The Task Force met regularly over a 14-month period and developed a series of recommendations and a final report for presentation to the BCC. The Task Force work is now complete.

Attachments:

1. Final Report including PBC Inventory of Environmental Sustainability Initiatives (Note: The final report was created for on-line viewing. With the exception of the inventory, content accessible through click-on links was not copied for this attachment.)
2. PowerPoint Presentation

Recommended by: N/A
Department Director **Date**

Approved By:  9-18-09
Assistant County Administrator **Date**

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years 20 10 20 11 20 12 20 13 20 14

Capital
Expenditures
Operating Costs
External Revenues
Program Income (County)
In-Kind Match (County)

NET FISCAL IMPACT ✕

No. ADDITIONAL FTE
POSITIONS (Cumulative)

Is Item Included In Current Budget? Yes _____ No _____
Budget Account No.: Fund _____ Department _____ Unit _____
Object _____ Reporting Category _____

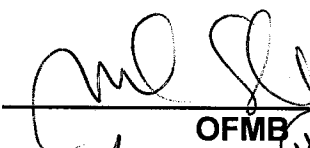
B. Recommended Sources of Funds/Summary of Fiscal Impact:


✕ The fiscal impacts associated with the Task Force recommendations will be presented as part of this workshop item.

C. Departmental Fiscal Review:


III. REVIEW COMMENTS

A. OFMB Fiscal and/or Contract Dev. and Control Comments:


OFMB 9/18/09
(Handwritten notes: 9/18/09, 9/18/09)


Contract Dev. and Control 9/18/09

B. Legal Sufficiency:


9/21/09
Assistant County Attorney

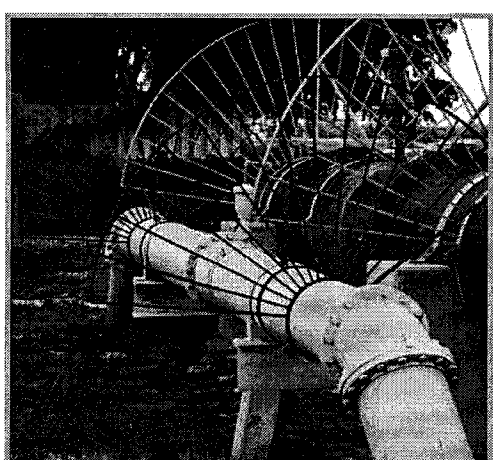
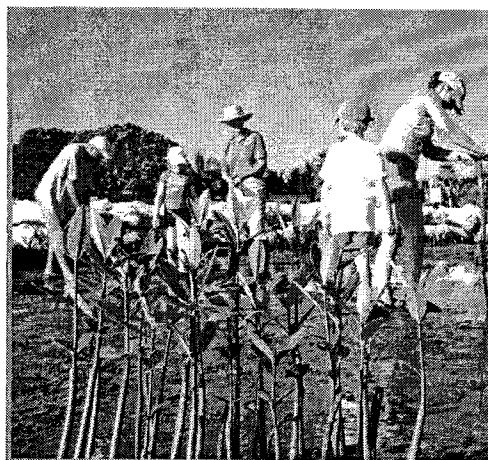
C. Other Department Review:

Department Director

REVISED 9/03
ADM FORM 01

(THIS SUMMARY IS NOT TO BE USED AS A BASIS FOR PAYMENT.)

Palm Beach County Green Task Force on Environmental Sustainability and Conservation



Report to the
Board of County Commissioners

July 2009

ACKNOWLEDGEMENTS

The Palm Beach County Green Task Force would like to acknowledge and thank County Administration, the Department of Environmental Resources Management, the Palm Beach County Planning Zoning and Building Department and the Facilities Development and Operations Department who assisted us and provided input throughout the year-long process of creating this report.

Special thanks to the numerous County staff who attended the Task Force and subcommittee meetings, made presentations, and developed supporting data for the work of the Task Force and to the Office of the Clerk and Comptroller for recording Task Force Meetings and managing meeting minutes.

And finally, a thank you to the Palm Beach County Board of County Commissioners for creating the Task Force and allowing the citizens of Palm Beach County to help establish a sustainable future for Palm Beach County.

Please note that this document is intended to be viewed electronically to limit the need for printing. References are available throughout the document when noted by "Click Here." These are live links and will launch the referenced document when an Internet connection is available. If printing is necessary, the document is formatted for double-sided printing.

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**PALM BEACH COUNTY GREEN
TASK FORCE ON ENVIRONMENTAL
SUSTAINABILITY AND
CONSERVATION**

EXECUTIVE SUMMARY

JULY 2009

PALM BEACH COUNTY GREEN TASK FORCE ON ENVIRONMENTAL SUSTAINABILITY AND CONSERVATION

EXECUTIVE SUMMARY OF REPORT TO THE BOARD OF COUNTY COMMISSIONERS

JULY 2009

SUMMARY CONCLUSIONS

- The County has explored a number of green issues and is implementing a number of green policies. The County and its staff should be commended for these efforts.
- The green efforts are, however, somewhat sporadic, generally lacking the direction, and therefore effectiveness, of a Countywide sustainability effort.
- There is significant room for improvement both in the implementation of previous reports that have been delivered to the Board of County Commissioners (e.g. Alternative Energy Task Force and Office of Economic Development), and in the coordination of green efforts that are already being implemented.
- There are potentially significant cost savings that could be generated from a variety of policies.
- There is the potential for significant economic development within the County as the green economic sector grows.
- Ultimately, this Task Force could generate an almost limitless list of green ideas to pursue...and as fast as the green world changes, many of those ideas would could soon be outdated by the time they are delivered in a report. This Task Force has generally learned that staff and officials know best how to implement the County's programs, and thus how to best develop policies...but sustainability is not integrated into the County's process. The success of the County's sustainability initiative, therefore, ultimately rests far more upon the ability of the County to truly integrate green philosophy into every day policies, actions, and mindsets, rather than upon the ability of Task Forces such as this one to generate ideas and reports. It seems that the fact that so many task forces focused on green issues have already overlapped and repeated investigations, while accomplishing very little actual change, would support this conclusion.

GREEN TASK FORCE OVERVIEW

On June 3, 2008, the Palm Beach County Board of Commissioners adopted Resolution R-2008-1007 Appointing a Green Task Force on Environmental Sustainability and Conservation, whose mission was:

“to identify actions and policies that can be implemented by the Board of County Commissioners to encourage healthier, more resource efficient and more sustainable buildings, energy and natural resources conservation and environmental sustainability.”

The Task Force was divided into subcommittees in the following areas:

- Government
- Energy
- Green Building
- Environment
- Education

The final report outlines the top 3 recommendations that emerged from each subcommittee.

ECONOMIC, ENVIRONMENTAL, AND POLITICAL CONTEXT

It is important to understand how the County's efforts fit into the growing green dialogue. There has been and continues to be rapid change in a variety of areas impacting the County government in the following areas:

- Economic opportunities through conservation and economic development
- Increased concern about pressures on environmental resources
- Significant political changes at the Federal, State, and Local levels

CURRENT COUNTY GREEN INITIATIVES

The Task Force learned that Palm Beach County has already undertaken and implemented a number of green initiatives. Of note as well is that the Task Force realized there were a lot of efforts throughout the County, however, these efforts were not coordinated in an organized manner. This led to concern on the

part of the Task Force that efforts were being duplicated as different parts of the organization explored similar topics and policies. Details of the following can be found in the complete report:

- County Internal Green Audit and Summary Report
- Alternative Energy Task Force
- Office of Economic Development
- Water Task Force
- Land Development Regulation Advisory Board
- Palm Beach County Schools

RECOMMENDATIONS

As noted, the top 3 recommendations to emerge from each subcommittee were included in the Report. These are outlined below. Details on these proposals are found in the complete Report.

SUMMARY TABLE OF TASK FORCE RECOMMENDATIONS BY SUBCOMMITTEE AND DEPARTMENT
Government Subcommittee Recommendations
<u>Recommendation 1:</u> Establish and Incorporate a Sustainability Administrative Infrastructure into County Administrative Operations
<u>Recommendation 2:</u> Establish a Financial Tracking Mechanism
<u>Recommendation 3:</u> Establish Comprehensive Countywide Energy Conservation and Green House Gas Emission Reduction Strategy (ECS) to Reduce Both Energy Consumption and Green House Gas Emissions (GHGE).
Energy Subcommittee Recommendations
<u>Recommendation 1:</u> Advocate for a Solar Rebate Program for Solar Water Heaters
<u>Recommendation 2:</u> Establish a Horse Manure Anaerobic Digestion Facility in the County
Green Building Subcommittee Recommendations
<u>Recommendation 1:</u> Mandate Recycling of Construction Waste
<u>Recommendation 2:</u> Create a Green Building Incentive Program for Private Developers
<u>Recommendation 3:</u> Create an Exemption from Architectural Guidelines for Green Buildings
Environment Subcommittee Recommendations
<u>Recommendation 1:</u> Commit to Long-term Support of and Funding for the Existing Conservation Lands Maintenance Program
<u>Recommendation 2:</u> Develop Policies to Preserve Agricultural Zoning and Encourage Urban Gardening
<u>Recommendation 3:</u> Develop and Implement Incentive Programs for Xeriscaping and Permaculture
Education Subcommittee Recommendations

Recommendation 1: Fund and Help to Organize the Annual Green, Energy, and Climate Conference / Expo

Recommendation 2: Develop and Maintain a Permanent Green Column on the Palm Beach County Government Website

Recommendation 3: Establish Green Collar Economy Enterprise / Cultural Training Centers Throughout Palm Beach County

SECTION A:

CONTEXT

CHAPTER 1: TASK FORCE OVERVIEW

RESOLUTION TO APPOINT A TASK FORCE

On June 3, 2008, the Palm Beach County Board of Commissioners adopted R-2008-1007 Appointing a Green Task Force on Environmental Sustainability and Conservation. ([Click Here](#) for Complete Resolution)

MAKEUP AND MEMBERS

The Task Force makeup and members were as follows:

SEAT	APPOINTEE
One (1) County Commissioner serving as Chair	Commissioner Shelley Vana (District 3 Commissioner) (replaced Commissioner Bob Kanjian)
Seven (7) citizens with expertise in building construction, energy management, environmental management, real estate, economic development, or community affairs nominated by individual commissioners.	Mark Queenan (District 1)
	Tricia Ward Waldman, CCIM (District 2)
	Greg Rice (District 3)
	Susan Haynie, Deputy Mayor, Boca Raton (District 4)
	Maria Lorts Sachs, State Representative (District 5)
	Mark Beatty, AIA LEED AP (District 6)
	Andrew Luchey (District 7)
One (1) municipal representative nominated by the League of Cities	Charles J. McCrosson, Vice-Mayor, Town of South Palm Beach
One (1) member of the South Florida Chapter of the United States Green Building Council	Joseph Snider, AIA LEED AP
Two (2) members recommended by environmental organizations registered as 501(c)(3) entities active in Palm Beach County	Jayne King
	Cynthia H. Plockelman
One (1) licensed professional architect LEED Accredited	Maureen Kussler, LEED AP (consultant non-architect)
One (1) licensed attorney, LEED Accredited Professional and Florida Bar certified in construction law.	Bruce Loren (resigned 3/5/09)
One (1) licensed professional engineer	Dr. Richard Goodwin, P.E.
One (1) licensed professional residential builder	Jon Peter "JP" DiMisa
One (1) licensed professional commercial builder LEED Accredited	John Banting, LEED AP
Director of the County Planning, Zoning and Building Department, or designee (non-voting)	Barbara Pinkston-Nau (designee)
Director of the Department of Environmental Resources Management, or designee (non-voting)	Bonnie Finneran (designee)
Director of the Facilities Development and Operations Department, or designee (non-voting)	Jimmy Beno (designee)

MISSION

Resolution R-2008-1007 defined task Force was defined as:

"to identify actions and policies that can be implemented by the Board of County Commissioners to encourage healthier, more resource efficient and more sustainable buildings, energy and natural resources conservation and environmental sustainability."

HISTORY

The Task Force held its first meeting in September of 2008, and met approximately one to two times per month through June of 2009. The Task Force chose to organize itself into 5 subcommittees which met separately, reporting back during full Task Force meetings. Those subcommittees and its members were as follows:

- **Government**

- Joe Snider AIA, LEED AP
- Nancy Byrne, Assistant Director of Development, City of Boynton Beach
- John Banting, LEED AP
- Renee Varella
- Cynthia Plockelman, Environmental Advocate, member of Audubon Society, Native Plant Society

- **Energy**

- Dr. Richard Goodwin, P.E.
- Dan Kozan
- Mark Takaki
- Rafael Tuburan
- Jim Finck
- Daniel Finnerty
- Marc Wiskoff
- Steve Homles
- David A. Stein

- **Green Building**

- Mark Beatty, AIA, LEED AP
- Tricia Ward Waldman, CCIM
- Joe Snider, AIA, LEED AP
- Maureen Kussler, LEED AP
- Vince Mercandetti
- Kyle M. Abney CGC, LEED AP+Homes
- John Banting, LEED AP

- **Environment**

- Jayne King, chair, member of Sierra Club Executive Committee

Cynthia Plockelman, Environmental Advocate, member of Audubon Society, Native Plant Society

Mary Jo Aagerstoun, Founder/ Director South Florida Environmental Art Project

Drew Martin, Conservation Chair, Loxahatchee Group, Sierra Club

- **Education**

Jayne King, chair, Community Educator

Lorraine Marks, Business Entrepreneur

Mary Jo Aagerston, Founder/ Director of South Florida Environmental Art Project

Christina M. Crespo, LEED AP, Recycling & Sustainability Coordinator, School District of Palm Beach County

Sandi Barrett, Palm Beach Community College

Jaene Miranda, Palms West Chamber of Commerce Executive Director

Andrew Luchey, Staffing Agency Director

The final recommendations were determined by each subcommittee bringing forward its top 3 recommendations, and this report has been organized accordingly.

Please note that numerous members of the Green Task Force and its subcommittees have offered continued assistance to the County in further development of the various ideas presented in this report.

[Click Here](#) for Minutes for all Task Force meetings. (Note that if this link is no longer working, minutes are available at www.pbccountyclerk.com by navigating to the "my minutes" section).

The final version of this report and appendices will be made available www.pbcgov.com and at all County libraries.

CHAPTER 2: ECONOMIC, ENVIRONMENTAL, AND POLITICAL CONTEXT

There are three main reasons for Palm Beach County to pursue a greener direction: economic reasons, environmental reasons and political reasons. Each of these is explored briefly below:

ECONOMIC CONTEXT

There is a deep-rooted perception in many individuals and organizations that environmental programs always result in higher costs. But this perception ignores three fundamental truths about going green:

1. By definition, environmental programs make communities less wasteful, more efficient, and healthier. Cities and counties across the State of Florida and in every part of the United States have repeatedly found this can be less expensive than becoming more wasteful, less efficient and less healthy.
2. Inefficient habits cost money: Many organizational practices result from habit and the belief that "this is how we do things here". Yet exploring these habits can reveal surprising cost savings. Two simple examples are purchasing more fuel-efficient vehicles, or switching to energy efficient technology. These simple changes can save millions of dollars in operating costs for cities or counties, large and small.
3. There is a green cost continuum: Some green actions may cost more, but others may be less costly immediately (such as purchase of remanufactured printer cartridges), or may require upfront investments with lower operating costs over time (such as retrofitting lights to more energy efficient versions), or be more expensive upfront but result in lower repurchase costs (such as buying durable goods instead of disposable)

Cities across the nation have found that well structured green programs have helped save millions of dollars, particularly in the area of energy efficiency and greenhouse gas reduction.

Examples include:

- In 2007, the first year of its energy management program, Fayetteville, Ark., saved \$300,000 in energy costs due to emphasis on energy conservation. One of its initiatives was the installation of thermostats that cost about \$100 and paid for themselves in one month.
- The City of Ann Arbor, Mich., received a \$630,000 grant from the Ann Arbor Downtown Development Authority to fund LED retrofits for 1,400 downtown lights. The energy-saving installations will save the city over \$100,000 per year.

- In Nashua, N.H., officials replaced light fixtures to improve energy efficiency at Street and Traffic Buildings for an annual saving of \$42,000. In addition, lighting upgrades and motion sensors at City Hall delivered an annual savings of \$6,500. New windows and frames in City Clerk offices alone lowered annual energy costs by 30%.

Finally, it has become readily apparent that “green” is no longer a fringe sector of the economy. With growing demands for green services and products in the marketplace, everyone from Walmart to the local café are going organic and green. Communities are increasingly seeing the opportunity to attract green business and green jobs. There is great potential for Palm Beach County to explore these opportunities to promote economic development within the County. The recent Stimulus Package that promotes the development of many green jobs is just an additional piece of evidence of this growing trend.

ENVIRONMENTAL CONTEXT

As Palm Beach County and South Florida grow, the environmental impact of its citizens and businesses may grow with it. However by implementing many of the green recommendations in this report, the County can meaningfully reduce its environmental impacts while improving citizen livability and reducing long term risks.

Energy

As energy costs rise, Florida continues to feel the impacts as well. The growing use of energy presents continued problems as we try to find ways to produce more energy. Utility rates for Florida residents continue to rise. The need for cleaner and more affordable fuel alternatives is apparent. In addition, there is a growing sentiment that we should reduce our dependence on foreign sources for energy.

Climate Change

Governor Crist and other Florida organizations have stated that Florida is on the front lines of environmental impacts from climate change. There is increasing evidence from scientists that hurricane activity may be linked to man-made climate impacts, and numerous organizations have released projected coast line impacts showing large portions of our state under water under the current projections for sea-rise. These areas coincide directly with our largest population centers, and present rather troubling environmental and economic scenarios. There appears to be a significant vested interest for Florida to take the lead on making sure such sea-level rise does not happen.

Water

Water shortages in Florida continue to be an ongoing problem. The South Florida Water Management District has stated that it cannot continue to guarantee water for further population growth and development. In addition, the existing water ways and the Everglades continue to have significant problems related to pollution, agricultural run-off, and other contaminants. Many areas in the state continue to struggle with polluted water being dumped into the Intracoastal waterway, the Gulf, and the ocean.

Transportation

The general sentiment is that gas prices over the long term will continue to rise, putting pressure on motorists. South Florida and Palm Beach County residents will likely feel these costs, as our regional transportation networks are heavily auto dependent. As population and traffic grow, it will be important to think about long term transportation strategies that offer alternatives to the automobile.

Waste

As Palm Beach County grows as well, there is the constant question of how to dispose of waste. This problem and expense will continue to be an issue as we move forward. Finding new places to put landfills is becoming increasingly difficult, and the ones we have are often costly to operate, as well as present environmental hazards. Long-term strategies to handle our waste stream more environmentally responsibly and economically will be critical.

POLITICAL CONTEXT

In the current political context, no government body can ignore environmental issues – particularly those related to energy, climate change and green building. There is a new green political reality where green issues have risen toward the top of the agenda.

Federal Government

On November 4th 2008, President-Elect Obama stated that one of the major challenges to our future included a “planet in peril”. As such, the Obama Administration has acted quickly to bring environmental issues to the top of the political agenda. Key green elements of an Obama environmental plan that is already being circulated include:

- *Energy Efficiency.* Major increases in funding to improve the efficiency of government, commercial, and residential buildings as well as the industrial sector.
- *Renewable Energy.* Broad support for new development of both small-and large-scale projects in solar, wind, geothermal, advanced biofuels, etc.
- *Grid Modernization.* From upgrades to our transmission and distribution system to installation of smart energy meters for households and businesses.
- *Mass Transit.* Funding “ready-to-go” projects, such as the \$16 billion in projects that could break ground in 2009, according to the American Public Transportation Association. This will include a range of programs to accelerate transition to low-emissions personal and commercial vehicles including electric and plug-in hybrids.

Significant pieces of the Stimulus Package incorporate green concepts, as much as \$40 Billion by some estimates. In addition, the Federal government already mandates green certified construction for many Federal buildings, as well as numerous other green programs. Currently as well, a Climate Bill is currently being discussed in Washington, D.C. that could initiate a “cap and trade” program to limit green house gas emissions and spur economic development of more efficient technologies.

It is critical for any local government to be in tune with the rapidly changing international and national political landscape surrounding green policies.

State of Florida

Prior to the elevation of political interest in green issues at the national level with Obama's election, in 2007 Governor Charlie Crist signed three climate change related Executive Orders in Florida. ([Click Here](#))

- Executive Order 07-126 set greenhouse gas reduction targets for state agencies and departments and adopted the U.S. Green Building Council's LEED standards for all new state government facilities and all existing buildings owned by the Department of Management Services.
- Executive Order 07-126 required state-owned vehicles to be more fuel efficient and to use ethanol and biodiesel fuels when available.
- Executive Order 07-127 requests that the Florida Public Service Commission initiate rulemaking to 1) require that utilities produce at least 20 percent of their electricity from renewable sources and 2) authorize statewide net metering.
- Executive Order 07-128 creates the Florida Governor's Action Team on Energy and Climate Change to develop an Energy and Climate Change Action Plan to recommend ways to meet the new greenhouse gas reduction targets.

In addition, the Florida legislature has been very active, passing HB 7135, a comprehensive energy bill that mandates green construction for Florida public buildings, as well as a host of other measures. Another example is HB 697 that is pushing for sweeping changes to make local Comprehensive Plans more sustainable.

There is every indication that the current green mood in Tallahassee will continue. Many local jurisdictions are seeking to begin implementing policies and programs now, as there is a feeling that sooner rather than later, such changes may be mandated from the Governor and from the Legislature.

Local Government

Throughout the State, Counties have been pursuing green initiatives. Some examples include Sarasota County, Alachua County, and St. Lucie County. Each of these counties is coordinating to reduce the environmental impacts of County operations, reduce operating costs, and promote sustainable economic development. Miami-Dade County has established a committee to determine how to respond to the growing threat of Climate Change. There is a growing consensus among Florida Counties that the County is a critical link in how local communities and the State of Florida will go address regional environmental concerns and embrace regional opportunities for sustainable economic growth.

At the City Level, by end November 2008 over 900 U.S. mayors had signed the U.S. Mayors Climate Protection Agreement, and as such had publicly agreed to "reduce global warming pollution by taking

actions in the City's own operations and communities". ([Click Here](#)) Numerous jurisdictions in Palm Beach County have signed on to this agreement (e.g. West Palm Beach, Boca Raton, Delray Beach). Within Palm Beach, numerous cities have established green task forces and are aggressively pursuing green reviews of their own operations and development regulations. Boynton Beach and Delray Beach have established local citizen green advisory boards. Many of these communities are beginning to partner with one another as they come to the conclusion that there is more opportunity through partnership in our densely populated County. The County government has an important role to play in coordinating these local efforts.

CHAPTER 3: EXISTING COUNTY GREEN INITIATIVES

As the Green Task Force began its work, it quickly became apparent that in order to define where the County could go to be green, we had to define what the County was already doing that was green. An extensive audit of County activities showed that the County had already implemented a number of green policies, and some departments were actually proving to be quite successful in achieving green government practices. The following is by no means a complete list of every current County green practice, but represents a quick baseline of where the County is today.

Of note as well is that the Task Force realized there were a lot of efforts throughout the County, however, these efforts were not coordinated in an organized manner. This led to concern on the part of the Task Force that efforts were being duplicated as different parts of the organization explored similar topics and policies.

FLORIDA GREEN BUILDING COALITION INTERNAL AUDIT / PALM BEACH COUNTY INVENTORY OF ENVIRONMENTAL SUSTAINABILITY INITIATIVES

As the Task Force began trying to determine what practices were already in place, County staff began an extensive audit throughout the County. The County began using the Florida Green Building Coalition Green Local Government checklist, distributing it to departments. The responses to the checklist and a resulting summary report provide a comprehensive review of County Green practices in the Palm Beach County Inventory of Environmental Sustainability Initiatives. [Click Here](#) to view this report in its entirety.

In addition to this report, numerous County Staff gave presentations to the Task Force on their department's green initiatives. These included a presentation from the Fleet Manager who shared a great deal of information on the County's green fleet programs ([Click Here](#)). Facilities as well gave a comprehensive presentation ([Click Here](#)). As a result of many of these presentations, the Green Task Force found that many of these areas required less focus from the Task Force as many programs were already in place.

ALTERNATIVE ENERGY TASK FORCE

In January 2007, the Palm Beach County Overall Economic Development Program Committee formed the Alternative Energy Task Force. This Task Force delivered a report of recommendations to the County in November of 2007. These recommendations included:

- Action Item # 1: Launch an initiative to make all government buildings and public spaces demonstration sites for various forms of "green technology"
- Action Item # 2: Create a website which will serve as a "clearinghouse" for green information
- Action Item # 3: Create a Palm Beach County Alternative Energy Development Council
- Action Item # 4: Launch an initiative that will support the growth in green curricula at the local Colleges, High Schools, and Middle Schools

([Click Here](#) to view this report in its entirety).

OFFICE OF ECONOMIC DEVELOPMENT SUSTAINABILITY PLAN

In March of 2007, the Palm Beach County Office of Economic Development delivered its *Palm Beach County Strategic Economic Development Plan* to the Board of County Commissioners. This report contains only 5 different areas of Strategic Directions, one of which is an entire section on Sustainability. There are extensive detailed recommended actions in this report. The Green Task Force was unable to determine if there was any follow up or implementation to this 75 page detailed report. ([Click Here](#) to view the report in its entirety).

WATER TASK FORCE

In October 2008, the Board of County Commissioners adopted a resolution to form a Water Resources Task Force "to identify and evaluate efficient and cost-effective opportunities in the provision of future water supplies." The County notes:

"This volunteer group of water managers and engineers studies ways to protect our current and future water supply. One possibility they have suggested is to alter the water tables in certain areas during the dry season to maximize surface water storage capacity. The task force also recommends looking at creating a second regional reservoir out west. Right now, storm water in the C-51 Canal is being lost to tide, but several billion gallons could be diverted from the canal and stored in nearby limestone pits, then sent south as needed to replenish well fields in central and southern Palm Beach County and Broward County."

LAND DEVELOPMENT REGULATION ADVISORY BOARD

The Land Development Regulation Advisory Board appears to be exploring green issues through its Subcommittee Structure including sub-committees such as:

- Pervious Task Force Subcommittee
- Renewable Energy Subcommittee

([Click Here](#) for more information)

PALM BEACH COUNTY SCHOOLS

The School District of Palm Beach County has just completed the second year of its "Green Schools Initiative" which began in 2007. This District-wide program encourages and aides schools in increasing their recycling rates, decreasing their waste generation, energy and water consumption, adjusting their purchasing to include more environmentally-preferable choices, protecting and enhancing indoor air quality, and overall, enhancing the schools' environmental performance. At the beginning of 2007, the District created a new, permanent "recycling and sustainability coordinator" position. This person reports to the District's Utility Manager in the office of Environmental Controls. Some of the job responsibilities are to act as a liaison to the schools on topics including waste reduction, recycling, and energy and water conservation, develop new "green" policies, chair a multi-department "green team", act as an internal

advisor on all LEED projects, and provide education and outreach to District staff, parents, and students using a dedicated website and field visits.

A few highlights of the *Green Schools Initiative* in the 2008-2009 school year:

- Constructed the first and only LEED Gold certified school in the state of Florida (Pine Jog Elementary)
- Registered 5 new LEED projects
- Have more than 40 LEED Accredited Professionals on staff
- Passed mandatory indoor air quality, recycling, and energy & water conservation policies
- Partnered with the Community Foundation for Palm Beach and Martin Counties and the Pine Jog Environmental Education Center on the Green Schools Recognition Award program
- Launched a dedicated green schools website ([Click Here](#))
- Doubled recycling rates in schools and administrative offices
- Began a "farm-to-table" program to bring more locally-grown produce to school cafeterias
- Reduced energy consumption District-wide by over 10 percent
- Purchased a number of hybrid and smaller-sized vehicles to replace large diesel trucks

SECTION B:

**RECOMMENDATIONS BY
SUBCOMMITTEE**

CHAPTER 4: GOVERNMENT SUBCOMMITTEE RECOMMENDATIONS

The Government Subcommittee sought to review general County operations for green implementation opportunities. The Subcommittee spoke with and received presentations from numerous department heads on their efforts. The general focus of the subcommittee was to review internal operations of the County.

RECOMMENDATIONS

Recommendation 1: Establish and Incorporate a Sustainability Administrative Infrastructure into County Administrative Operations

Context

- Successful green governments consistently establish a structure of staff and / or citizen boards that work to set the government-wide goals and then create policies to translate those goals into action.
- The County currently has no specific person, department, or board to oversee sustainability programs.
- There is little to no communication or coordination within the County on these issues. A great deal of greening is being done, but there is little communication between departments, or even knowledge of activities and initiatives.
- A huge amount of energy and time has been expended exploring green County initiatives, but that work is consistently being duplicated because there is no mechanism to coordinate the efforts. The Green Task Force uncovered efforts, previous Task Force Recommendations, and Sustainability Plans that are sitting dormant because there is not mechanism for communication and coordinated implementation. The Task Force uncovered numerous different and uncoordinated efforts including overlapping work by the following:
 - This Green Task Force
 - The Office of Economic Development
 - The Water Task Force
 - The Land Development Regulation Advisory Board Renewable Energy and Pervious Task Forces
 - The Alternative Energy Task Force

- In short, there is grave concern that the County keeps duplicating efforts and re-inventing the wheel.

Intent

To establish a system for coordinating and then implementing green County efforts.

Implementation

It is understandable that these separations occur within government, however, it appears that after many years of uncoordinated efforts, it is time to establish a system for managing Countywide green goals and implementation efforts.

The Task Force is recommending a three-fold structure to this structure:

- Create a Sustainability Coordinator Position
- Establish and appoint a permanent Green Advisory Board
- Establish an internal Staff Green Team

Detailed suggestions on the make up of these positions are as follows:

Sustainability Coordinator

The role of this position is to coordinate and manage county-wide sustainability initiatives with the goal to improve efficiency and promote sustainability.

The Sustainability Coordinator would:

- Work in conjunction with *all* county departments to assist in identifying inefficiencies and propose cost effective sustainable improvements.
- Be placed at a high enough level so that there is authority to coordinate with multiple departments.
- Coordinate with finance to track improvements to quantify cost savings.

Funding is likely available through:

- Savings (numerous governments have shown these positions to pay for themselves, often many times over)
- Energy Conservation Block Grant in the Federal Stimulus Package.

Suggested **Key Roles** of Sustainability Coordinator would be:

- Serving as a central point of contact for the County
- Coordinate and manage county-wide sustainability initiatives
- Serving as a liaison to a Green Advisory Board
- Coordinating internal staff efforts and communications between departments (meetings, activities, etc.)
- Guide and assist in County sustainable initiatives
 - Intergovernmental coordination of sustainability efforts
 - Creating a central library for green initiatives (e.g. Alternative Energy Task Force Report, this report, Office of Economic Development Sustainability Plan, Fleet Management Reports, Facilities reports etc.)
 - Annual green county evaluation report
 - Aid BCC in understanding sustainable initiatives
 - Identify associated paybacks and potential costs
- Develop Sustainable Policies and Practices
 - Green Purchasing Policy
 - Green Fleet Policy
 - Green Building Policy
 - Coordinate a Climate Action Plan
- Pursue Grants and Funding Opportunities
 - National and State funding
 - Private funding Work with the Finance Department to establish cost tracking and subsequent cost savings from green policies.
- Provide General Oversight
 - Departmental efficiency evaluation
 - Recycling
 - Monitor adopted policy to ensure implementation
- Promote Education and Awareness
 - Engage citizens to promote and educate sustainable initiatives
 - Develop sustainable programs with communities to promote sustainability
- Quantify Success
 - Annual green report quantifying cost savings of sustainable initiatives include additional costs

Please find referenced a sample job description and qualifications list for such a position as drafted by the City of Oldsmar, FL. ([Click Here](#))

Best Practices Implemented in Other Jurisdictions

- Alachua County is a leader in the state for sustainable initiatives. The counties "Sustainability Program Manager" similar to the position described above has been an essential ingredient to their success. The county has drastically reduced their carbon footprint through establishing a baseline and applying sustainable concepts to Alachua County's internal practices. Alachua County was the first county in the country to create a feed-in tariff to promote the use of renewable energy sources. [Click Here](#) to see the attached description of the Sustainability Program Manager's job duties and essential activities.
- The City of Miami has multiple paid positions in a comprehensive Office of Sustainable Initiatives. ([Click Here](#))
- The City of West Palm Beach has recently established an Office of Sustainability with a Director position.
- Chatham County, NC has created and staffed a Sustainable Communities Development Director position. ([Click Here](#))
- Many other jurisdictions nationwide such as:
 - Chicago, IL
 - Portland, OR
 - Pittsburgh, PA

Green Advisory Board

Create a "GREEN ADVISORY BOARD for Environmental Sustainability and Conservation". (GABESC)

Purpose of the Board:

- To identify actions and policies that can be implemented by the Palm Beach County Board of County Commissioners (BCC) to encourage healthier, more resource efficient living for County residents and visitors and within the operation of Palm Beach County Government through more sustainable buildings, energy and natural resource conservation and other environmental sustainability concepts.

It is proposed that the GABESC meet bimonthly to review the policies and activities of the county as established by the BCC and as represented by the County Environmental Sustainability Coordinator and support Green Team members.

It is proposed that the Board:

- Encourage green building concepts
- Develop energy and resource conservation for county buildings and operations
- Review potential policy and code revisions for incorporation of green concepts
- Explore grant funding for county environmental sustainability coordination
- Promote intergovernmental support and coordination
- Evaluate concepts for feasibility, ease of implementation and economic benefit
- Track implemented initiatives for effectiveness and cost savings

Tasks for this Board might include:

- Review the Green Task Force (GTF) Final Report and all other green reports created by prior Green Task Forces. Explore the logistic and economic feasibility of all of these proposals, ranking and prioritizing recommendations.
- Recommend additional sound green concepts with environmental benefits
- Review Palm Beach County Environmental Sustainability Initiative Report and provide recommendations to the Internal Green Team
- Review reports from the County Sustainability Coordinator that track the savings to the county
- Deliver Reports:
 - 6 month-Interim Report: due after 1st GABESC meeting – to include 1) summary of activities 2) preliminary evaluation and prioritization of the recommendations identified in the Green Task Force Final Report 3) preliminary tracking reports
 - First Annual Report: due 1 year after 6-month Interim Report– Annual report to include 1) summary of activities 2) Evaluation and Prioritization of the Green Task Force Final Report 3) financial tracking reports of implemented initiatives.
 - Annual Report: due annually thereafter – include at a minimum 1) summary of activities 2) summary of Green Initiatives 3) financial tracking reports 3) recommendations for future initiatives.

It is recommended that the GABESC be composed of seven (7) members appointed by the Board of County Commissioners and has the powers and duties to adopt rules of procedures.

The proposed make up of the Board is as follows:

- Municipal representative from the League of Cities
- Member of an Environmental Group with a professional degree and background in environmental sustainability
- Registered / licensed architect, registered in the State of Florida and LEED Accredited
- Professional engineer, registered in the State of Florida and LEED Accredited
- Commercial / residential builder / developer with LEED accreditation and / or experience building or developing a LEED project
- Citizen-at-large with a college degree and experience in business administration
- Citizen-at-large with a college degree and experience in natural resource conservation

Best Practices Implemented in Other Jurisdictions

Numerous jurisdictions have established similar type boards or citizen groups to work with government staff, including:

- City of Boynton Beach, FL ([Click Here](#) for more information)
- City of Delray Beach, FL
- City of Hollywood, FL ([Click Here](#) for more information)

Internal Staff Green Team

Create a Palm Beach County Sustainability Team to Assist the County Sustainability Coordinator in Efforts towards environmental sustainability for Palm Beach County Government, the regulated community, and the general public.

It is recommended that County departments:

- Support as needed (with an expectation to not exceed an average of 4-8 hrs per month) to further the goals and objectives of the County's Sustainability Coordinator. Voluntary participation within the department is encouraged.
- Work in cooperation with the Sustainability Coordinator to implement initiatives and track for cost savings and environmental sustainability.

- Increase awareness and general morale related to green initiatives implemented by the county.
- Look for green initiative opportunities within own department and coordinate laterally, up, and down.

As the Office of Economic Development is administering the Stimulus monies for the Energy Conservation Block Grant, it seemed appropriate to recommend that they coordinate and establish the green team.

Best Practices Implemented in Other Jurisdictions

- The City of Boynton Beach, FL has been very successful in coordinating the efforts of its staff through such an internal green team. The program is continuing to gain momentum as staff become more excited and educated about green initiatives and their daily operations.
- The City of Sarasota has an internal Environmental Management Task Force made up of city staff. ([Click Here](#))
- City of Lake Worth

Recommendation 2: Create a Centralized Financial Tracking System to Quantify and Qualify the Savings Attributed to County Sustainability Efforts

Context

- The County budget is critical to any County program or initiative.
- Green programs have repeatedly proven themselves to be cost effective, generating significant savings.
- The success of green programs is contingent upon proof that the measures being taken are truly cost-effective.
- For a sustainability officer/department to be effective, they must first be affordable, cost-effective, and most importantly eventually generate savings in the institution in which they serve.
- There does not appear to be any current tracking mechanism within the County to track cost savings from specific programs. Some departments have attempted to do this in certain cases, but there is not a big picture snapshot of what green programs are truly accomplishing from a budgetary perspective.

- The current practice of individualized department budgeting can often be a hurdle to understanding long-term cost implications of County-wide green programs.

Intent

To create a process for tracking the costs and returns of green programs implemented by the County.

Implementation

Typically, each department and/or institutional subdivision would perform their own budgetary analysis and claim cost saving measures as their own. While this is usually a positive and expected practice, it is recommended that savings from implementation of the broad green measures be kept centralized under the sustainability officer and the Countywide finance personnel. The Green Task Force had concerns about the current departmental budgetary process, which appears to be very compartmentalized. Often green practices from one budget area, can promote savings in another area. (For example, modest construction costs could reduce long-term operations costs for a building, but be coming from two separate budgets).

Specifically, it is recommended that the county budget and finance office establish a separate accounting 'department' for the sustainability officer/department, whereby itemized direct expenses and savings from implemented measures can be clearly depicted. The head of said 'department' could be the sustainability officer and all budgetary reporting would go through them. It is also incumbent upon the budget and finance office to seek any departmental budgeted savings attributed to energy, water, and other conservation efforts that are incorrectly allocated to the departments and appropriately allocate them to the sustainability officer/department.

The long-term goal would be to earmark savings into an "account," from which future sustainability (and further cost-saving) measures could be paid for. For example, the savings from some simple no / low-cost items today, could then be used in the future to pay for higher capital cost items that also have longer term cost savings.

Best Practices Implemented in Other Jurisdictions

- Boulder, CO has implemented such a reporting and tracking system. ([Click Here](#))
- Many businesses have begun tracking the success of these measures in their bottom lines. GreenBiz.com notes these practices in *Tracing and Tracking a Sustainability Footprint*. ([Click Here](#) for this article)
- A Climate Group report (*Carbon Down, Profits Up*) shows Portland having saved more money through carbon reduction than any other major City it studied: over \$300 million saved by the city and its residents through its carbon reduction efforts. ([Click Here](#) for this report).

Recommendation 3: Establish Comprehensive Countywide Energy Conservation and Green House Gas Emission Reduction Strategy (ECS) to Reduce Both Energy Consumption and Green House Gas Emissions (GHGE).

Context

- The Task Force quickly realized that there is no Countywide energy conservation strategy or plan.
- Different departments are working sporadically within their own areas, with no measurable or quantifiable goal, and no ability to measure or quantify results from their efforts.
- On June 25, 2008, Governor Crist signed into legislation, House Bill 7135. This legislation mandates that all county, municipal, school district, water management district, state university, community college, and Florida state court buildings be constructed to meet the United States Green Building Council (USGBC), Leadership in Energy and Environmental Design (LEED) rating system, the Green Building Initiative's Green Globes rating system, the Florida Green Building Coalition standards, or a nationally recognized, high-performance green building rating system as approved by the Department of Management Services. These new regulations apply to all buildings for which architectural plans were commenced after July 1, 2008. ([Click Here](#) to access the bill)
- In addition, Governor Crist signed HB 697 on June 17, 2008, which heavily impacts Florida's Building Code and adopts the International Energy Conservation Code (IECC) as additional regulating statutes. And the Governor's Climate Action Plan, Executive Order # 07-128, effective July 13, 2007, mandates reduction of statewide Greenhouse Gas Emissions (GHGE) by the year 2017 to the year 2000 levels. ([Click Here](#) to access the HB 697 and [Click Here](#) to access the Governor's Executive Order)
- The State has instituted extensive Comprehensive Plan Changes. The following changes were enacted by the Governor effective with the signing of HB 697, and the Comprehensive Plan was expanded to include:
 - Future Land Use Element - 163.3177(6)(a) –
 - The discouragement of urban sprawl
 - Energy-efficient land use patterns accountable for existing and future electric power generation and transmission systems;
 - Greenhouse gas reduction strategies.
 - Traffic Circulation and Transportation Elements
 - 163.3177(6)(b) – The traffic circulation element shall incorporate transportation strategies to address reduction in greenhouse gas emissions from the transportation sector.
 - 163.3177(6)(j) The incorporation of transportation strategies to address reduction in greenhouse gas emissions from the transportation sector.
 - Conservation Element – 163.3177(6)(d)
 - Including factors that affect energy conservation

- The land use map or map series shall generally identify and depict the following: energy conservation.
- Housing Element – 163.3177 (h)
 - Energy efficiency in the design and construction

Intent

To create a systematic plan identifying funding opportunities, establishing programs to facilitate and measure efficiencies established by setting benchmark levels for energy and GHGE reductions.

Implementation

The Governmental Sub-Committee of the Green Task Force is recommending that the County Commission undertake a GHGE study to establish a benchmark year from which measurable reporting of GHGE reductions will be made to meet the Governor's directives.

While the above are unfunded mandates from the State, there is a funding opportunity through the Energy Efficiency and Conservation Block Grant (EECBG) for the County to offset the cost of both the Energy Conservation Strategy (ECS) and GHGE benchmark with Federal Stimulus funds. By just submitting an application for the County's allocation of \$6,587,600, the County is immediately eligible for \$250,000 to complete the ECS. In addition to the EECBG funding, there are numerous more opportunities within the American Recovery and Reinvestment Act that the County should be actively pursuing. Senator Ron Klein's office has compiled a very comprehensive list of Stimulus funding opportunities, with specific emphasis on those most applicable to Florida. ([Click Here](#))

With the current availability of Federal funds, the County is well poised to take advantage of this unique opportunity to fund this recommendation with Stimulus money. There will be staff time required to assist with compilation of data, tracking, reporting and measurables, but again, administration costs are allowable within several of the Stimulus programs.

Best Practices Implemented in Other Jurisdictions

- The City of Miami has adopted a Climate Action Plan similar to HB 697 and established a goal to reduce greenhouse gas emissions by 25% by the year 2020 ([Click Here](#) for the Plan). The Plan addresses five initiatives in four primary sectors that can be applied to Palm Beach County:
 - I. Buildings
 - a. Increase energy efficiency in buildings
 - II. Energy
 - a. Reduce greenhouse gas emissions from energy generation
 - III. Transportation

- a. Reduce emissions from transportation

IV. Land Use

- a. Adopt land use strategies which encourage Smart Growth
 - b. Begin process of planning for climate change impacts (e.g. rise in sea level)
- The City of Chicago has also adopted a climate action plan that is available online. ([Click Here](#))

ADDITIONAL TOPICS AND IDEAS FROM THE GOVERNMENT SUBCOMMITTEE

- Stimulus funding and how the County might be able to benefit from green stimulus funding for local governments.
- Coordination with other governments: The subcommittee discussed at length the importance of the County's role in coordinating green efforts with local municipalities, the State, and the Federal Government.
- The importance of moving forward with a climate footprint for the County to quantify current green house gas emissions, and then establish a comprehensive plan for reducing these.
- Establishing an inventory of green initiatives by the County. This was completed during the tenure of the Task Force and is available in Chapter 3 of this report.

CHAPTER 5: ENERGY SUBCOMMITTEE RECOMMENDATIONS

The Energy Sub-Committee's proposed actions prioritize energy usage reduction measures, considering the present economic downturn and achievability on a county level.

Short Term Energy Conservation proposed actions are easily implemented within next 3 – 6 months.

Long Term Energy Conservation are proposed actions – noting their implementation should be considered over the next 12 – 18 months (pending stabilization of financial uncertainty).

In developing our programs, the Energy Subcommittee embraced the following criteria: Short-Term with No/Low Cost and Long Term with Capital Cost requirements. Our programs reflected reducing energy consumption and concomitant reliance of fossil fuel powered plants. Wherever possible our programs would create jobs within Palm Beach County.

RECOMMENDATIONS

Recommendation 1: Advocate for a Solar Rebate Program for Solar Hot Water Heaters

Context

- Most experts assert that hot water usage is the second largest user of energy after air-conditioning. ([Click Here](#))
- Solar hot water systems can provide significant amounts of energy.
- Incentive based programs help to develop the local solar economy and create jobs.
- The Federal Government and the State of Florida currently have solar incentive programs.
- Florida, with its sunshine, is a great location for solar implementation.

Intent

To provide additional incentive for consumers to purchase solar hot water-heating systems.

Implementation

Support FPL's reinvestment in green energy within PBC by offering a rebate of \$750 for installation of solar hot water. This could be a lump sum or spread out as a bill credit over six months for the installation of a solar hot water system.

The ESC requests PBC Commissioners to prevail upon FPL to grant a rebate for Solar-Powered Hot Water Heaters. FPL will establish a rebate via an electric credit of \$750 over six months, for the installation of a solar hot water system installed by a licensed master plumber or a licensed Solar

company. As a benefit for FPL the homeowner will give back the carbon credits from such a system for five years. Basically both the homeowner and FPL gain from this rebate program.

This is an easy rebate program to implement by FPL & PBC. Since FPL does not have a solar rebate program it will take a concerted effort by Palm Beach County via the Board of County Commissioners to start a dialog for such a rebate program. Since the termination of The Sunshine Energy program, FPL has not followed through with the promises of solar rebates.

FPL solar energy hot-water heater rebate would create lots of jobs in the county and many happy homeowners. The Commissioner could have ribbon cutting in every district for the first solar system adopters and get great positive press coverage. This is a win-win proposal for PBC – FPL and the homeowners of Palm Beach County.

Best Practices in Other Communities

A Solar Utility Rebate program has been adopted by the following:

- City of Ocala Electric Utility
- City of Tallahassee Utilities
- Clay Electric Cooperative, Inc,
- Gainesville Regional Utilities
- Gulf Power
- Orlando Utilities Commission
- Jacksonville Electric Authority
- Kissimmee Utility Authority
- New Smyrna Beach
- Progressive Energy
- Tampa Electric

Recommendation 2: Establish a Horse Manure Anaerobic Digestion Facility in the County

Context

- There is a large equestrian community in Palm Beach
- This community pays to have its manure removed and disposed of.
- Horse manure has been captured and used as an energy source in other areas.

Intent

To create an economically advantageous program that captures local waste and converts it to energy for the County.

Implementation

This project entails Anaerobic Digestion [AD] of Horse Manure at Capital Cost of \$11 Million Dollars. A tipping fee of \$38/ton would achieve self-financing, yield a viable Return on Investment, create about 30 skilled jobs and provide energy for about 2600 homes.

Analysis

- The equestrian community of Palm Beach County reflects peak program activities from December to March. During this four-month period, approximately 320 Tons per Day [TPD] of horse manure is generated.
- Energy Generation and Capital Cost: The 320 TPD, when processed via AD, could generate 4.6 Megawatts [MW] of energy at Capital Cost of \$11 million.
- Economics: This Preliminary Evaluation determined Annual Costs including: Operating Cost and Debt Service. These costs were offset by revenue from sales of excess energy.
- Annual Cost:
 - Operating Costs, estimated at 7% of Capital Cost, = \$259,000/year
 - Debt Service, based on 10% interest rate and ten year pay-back = \$ 1.38 million/year
- Annual Revenue Saleable Energy: Approximately 30% of the total energy generated by AD is used to power the facility. The remaining 70% could yield an annual revenue [based on \$72.50 per MW-Hr] = \$672,000/year.
- Tipping Fee and Return on Investment: A Tipping Fee was determined based upon the Net Annual Costs with a Return on Investment [ROI] of 15% within five years. Tipping Fee = \$38 per ton
- Compare \$38/T tipping fee to present horse manure disposal cost.
- Consider establishing PBC mandate for horse manure waste flow control i.e. similar to C&D material.

Best Practices in Other Communities

- Florida Greensteam Equine Energy -- a limited liability corporation that the Florida Thoroughbred Breeders' and Owners' Association (FTBOA) formed with international firm Global Green Solutions -- has applied for \$7 million, the maximum amount Farm to Fuel allows for a commercial project. The money would go toward the projected \$25.3 million cost to build a plant in Marion, where an estimated 100,000 tons a year of horse muck -- a mix of manure, wood shavings and straw bedding -- as well as assorted wood waste would be burned.

The application submitted to the state says Florida Greensteam Equine Energy has negotiated potential purchase contracts with Progress Energy, Seminole Electric Cooperative and the Florida Municipal Power Agency, which is a partnership of municipal-owned utilities that includes Ocala Electric Utility.

- Onsite Power Systems of Fresno, CA is coordinating the construction of the small-scale pilot plant at UC Davis. In addition, On-Site Power was preparing to break ground in October on an APS-Digester system containing ten 350,000-gallon system tanks at the Palm Beach Thoroughbred Training Facility in Florida, to handle stable waste and wash-down water from 1,900 horses. The "feedstock" from the horse stables is about 20% manure and 80% straw, combined with the wash-down water. The manure-to-energy plant will generate about 2 megawatts of power — enough to meet the racetrack's needs and to sell surplus energy to local utilities. (This project's status should be determined and, if delayed, assess reasons.)
- Sigarca Inc., seeks a \$499,500 Farm to Fuel grant for a demonstration project at the North Central Florida Agriculture and Civic Center, formerly the Southeastern Livestock Pavilion. Sigarca Inc. promotes and markets a process developed at the University of Florida. Horse manure is loaded into tanks or "bioreactors" that are 12 feet long and 6 feet wide. Inside the tank, bacteria breaks the muck down into a methane-based gas fuel (suitable for energy utilization), a rich soil additive and a liquid spray dubbed "soil tonic," which is similar to compost tea. (This project's status should be determined and, if delayed, assess reasons.)

ADDITIONAL TOPICS AND IDEAS FROM THE ENERGY SUBCOMMITTEE

Energy Conservation & Reduction – Short Term

Our initial efforts included no cost energy conservation, recommending the following for existing PBC buildings:

- Set thermostats to 74 deg F;
- Set hot water heaters to 120 deg F.
- Change all light bulbs to Compact Fluorescent [CF] Units . Change all Exit Lights to LED. Change all Fluorescent Ceiling Fixtures to T-8 Electronic Ballasts
- Consider Timers and/or motion detectors to eliminate parasitic energy waste. Example: Motion Detectors and Timers would turn off lights when room unoccupied for more than ten minutes.
- Consider retrofit timers on hot water heaters, saunas, whirlpool etc.; shutting off units from 11 PM to 6 AM.
- Select pilot building(s) (government and/or school) for energy survey

Upon presentation of our initial recommendations during a GTF meeting, a dialogue developed between PBC staff and ESC surfacing that many of our Short-Term recommendations had already been implemented. This realization yielded a presentation by Jimmy Beno [Deputy Director Facilities Operations] showing how thermostat temperatures were set at 74 deg F and how CFL and timers were

retrofitted in many PBC buildings. This learning experience focused our attention on the Short-Term No-Cost FPL Rebate – Solar Hot Water Heaters.

Energy Conservation & Reduction – Long Term

Long Range Actions should consider present economic condition; delay of 12 – 18 months for recommended actions until financial situation stabilizes. Given this implementation hiatus, a complete analysis is deferred; instead Recommended Actions are attributed to each proposal – justifying their future consideration.

- Study of Methane gas applications - evaluate relevant issues from our landfills and landfill redevelopment. Survey and Inventory abandoned sanitary landfills in PBC to determine if Methane gas is vented and/or utilized. Example: Municipal golf course, on Lantana [between Lyons Rd and SR 7/441], was constructed on top of abandoned landfill. If Methane gases are not being vented, self-combustion is possible – posing PBC liability
- Reuse of Wastewater Treatment Bio-Solids – typically bio-solids generated from wastewater treatment plant are dewatered to about 30%; further thermal drying achieves 90% solids [suitable for transport]. This material's heat content encourages its use as a fuel while its nutrient content encourages its use as a soil-amendment. The USEPA has designated such material of "Exceptional Quality" suitable for use as fertilizer or fuel.

Investigations

PBC Solid Waste Authority [Landfill Gas] and Water Utilities Dept. [Bio-Solids]

Marc Bruner [Chief Administrative Officer Planning & Environmental Programs – SWA] explained that only viable source of Methane from landfill gas [LFG] emanated from their Jog Rd. facility. Field measurements revealed that SWA's other abandoned landfills yielding minimal LFG – posing no risk but, also, no viable source of usable Methane.

The LFG from Jog Rd. facility powers the 600 ton/day New England Fertilization Bio-Solids [sewage sludge] pelletization plant. This facility processes all available sewage sludge bio-solids from plants managed by PBC. This facility generates a fertilizer additive suitable for agricultural and landscaping applications. The ESC, once again, learned that PBC was already implementing LFG for energy conversion and generated processed bio-solids as fertilizer additive.

PBC Water Utilities Dept. [PBCWUD] – Bio-Solids Energy Conversion

Brian Shields [Deputy Director PBCWUD] confirmed that all available domestic sludge [bio-solids] from PBCWUD wastewater treatment plants were processed at Pelletization Plant. The remaining source of potential bio-solids was the energy conversion of horse manure. Flow control of this material – deemed an agricultural waste – required regulatory control beyond scope of PBCWUD.

CHAPTER 6: GREEN BUILDING SUBCOMMITTEE RECOMMENDATIONS

The Green Building Subcommittee focused on issues related to design, construction, and operation of both public and private sector buildings within Palm Beach County.

Of note, the Subcommittee examined closely House Bill 7135 that mandated that "all county, municipal, school district, water management district, state university, community college, and Florida state court buildings shall be constructed to meet the United States Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) rating system, the Green Building Initiative's Green Globes rating system, the Florida Green Building Coalition standards, or a nationally recognized, high-performance green building rating system as approved by the Department of Management Services. This section shall apply to all county, municipal, school district, water management district, state university, community college, and Florida state court buildings the architectural plans of which are commenced after July 1, 2008."

RECOMMENDATIONS

Recommendation 1: Mandate Recycling of Construction Waste

Context

- Construction & Demolition (C&D) Debris accounts for approximately 35% of solid waste stream in Florida ([Click Here](#) for reference)
- Up to 75% of primary construction materials are readily recyclable ([Click Here](#) for reference)
- Contributes to compliance with State legislation to build according to nationally recognized green building standard
- Contributes to compliance with State legislated recycling rates
- Cost of recycling often less than cost of disposal
- Potential revenue source for County

Intent

This recommendation is intended to:

- Encourage recycling and reuse of construction waste materials
- Increase diversion of debris from landfill and incineration

- Reduce impact on landfill
- Reduce pollution potential
- Conserve natural resources
- Stimulate local economy
- Generate revenue via licensing and penalty fees
- Incentive to contractors/developers via cost savings and revenue potential

Implementation

The Green Building Subcommittee researched other similar programs extensively and has drafted a proposed ordinance for the County. The Subcommittee drafted this ordinance with the intent to promote recycling efforts which would also help promote the local economy. The Subcommittee wrote the guidelines with the focus on ease of implementation, no cost to the County, and revenue generation for the County. These are all outlined in the Draft Ordinance. [Click Here](#) to view the Draft Ordinance.

In addition, grants are available to recyclers and small counties from Florida DEP. PBC does not qualify for "small counties" grants, but grants are also available via Innovative Recycling Grants Program. ([Click Here](#) for information on grants and [Click Here](#) for further grant information)

Best Practices Implemented in Other Jurisdictions

- Lee County, FL requires 50% diversion from construction projects of certain value, diversion fees are charged if project fails to meet criteria, waivers available. ([Click Here](#))
- Northbrook, IL requires 50% diversion from construction projects of certain size, increasing to 75% as of January 1, 2011, penalty fees assessed for projects failing to meet requirements, exceptions available. ([Click Here](#))
- Stockton, CA requires 50% diversion from all construction and complete building demolition projects, additional requirement for all composition roofing material (50%). ([Click Here](#))
- Sarasota County, FL encourages C&D Recycling, but does not yet have regulations. ([Click Here](#))

Recommendation 2: Create a Green Building Incentive Program for Private Developers

Context

- The issue of global warming is not going away, in fact, the problem is becoming worse every year. Palm Beach County as a community has done very little to reduce its carbon footprint.

- According to Architecture2030.org, the American Institute of Architects, the Department of Energy and others, buildings account for huge amounts of energy consumption, over 40% of our total energy usage. In addition, buildings consume huge amounts of other resources such as wood, metal, concrete, and water.
- Green buildings have been shown to conserve resources in numerous areas, both in their construction and long-term operations.
- Some studies have cited the cost of green buildings to run two to five percent above traditional buildings, depending upon level of certification, building type etc. In another study Davis Langdon determined in 2004, and again in 2006 that "There is no significant difference in average costs for green buildings as compared to non-green buildings". ([Click Here](#)). Additional studies are available [Here](#) and [Here](#).

Intent

To create energy efficient buildings and developments that will ultimately reduce green house gases in Palm Beach County, as well as reduce other environmental impacts from buildings.

Implementation

- Create an incentive program for private developers where they can receive an increase in density and or floor area (in accordance with the Florida Building Code 2007) that would financially offset the increase cost to build a USGBC LEED silver certified building.
- Palm Beach County has been developing a green building incentive program for limited special districts. The groundwork has already been laid for this program. It could easily be extended to all zoning districts in Palm Beach County. Palm Beach County zoning gave a presentation to the building incentive sub-committee to discuss our common goals.

The major issue for implementing this program was boiled down to policing. It can take up to two years to obtain LEED certification. It was felt that code enforcement could be in charge of overseeing this program. Developers could be charged a fee for processing which would eliminate the cost to the county. Developers would recoup the cost thru their density and or floor area ratio increase. This program is a win for our community, a win for the developer and a win for the environment.

Best Practices Implemented in Other Jurisdictions

- Gainesville, FL has been an early leader in green building in the State of Florida. Gainesville's efforts have been a model for many other ordinances. They have adopted a green building ordinance that includes fast track permitting for building permits, and a 50% reduction in building permit fee. To receive these incentives, an independent third party must certify the building as a green building. The city government also provides marketing incentives including erection of building signs at the site, placing participants on city Web site

and press releases. Finally, a Green Building Award from the City of Gainesville recognizes one participant each year that demonstrates commitment to the program.

- Sarasota County, FL created a "Green Building Ordinance" which is a virtual clone of the Gainesville ordinance, with some minor adjustments. The Ordinance Provides for permit fee reductions, fast track permit processing, public relations / marketing for green projects, and a yearly "Green Award" program.
- Sarasota has long been a Florida Epicenter of Green Building, and has several LEED Gold County Buildings including a Library and a County Office Building. A Whole Foods Market has been awarded a LEED Silver rating. The Sarasota Girl Scout Headquarters, Kanaya Condominium Tower, & Kimel Lumber have all been awarded various LEED ratings. These and others are the result in part of the stimulating effect of their Green Building Ordinance. The City of Sarasota has expedited permitting based on projects utilizing the Florida Green Building Coalition checklists and programs.
- The University of Florida in Gainesville is also in the forefront of green building and requires all new buildings to be built to LEED Silver standards. With an electric bill for the campus of over \$130 million a year, there is a tremendous incentive to construct efficient and environmentally responsible buildings.
- There are other incentives that have been implemented around the country. Tax incentives have been implemented in Baltimore county, MD., Chatham County, GA., Nevada and New York. With our current economy and the reduction of property taxes thru amendment one, the sub-committee felt this type of program would not be possible at this time.
- [Click Here](#) for additional information on other green building programs: "Summary of Green Building & Recycling Programs in Selected Cities in Florida & Nationwide". This Summary includes, in addition to those mentioned above, reviews of the following programs: Miami-Dade County, FL; Tallahassee, FL; Coconut Creek, FL; Palo Alto, CA; Pasadena, CA; San Jose / Silicon Valley, CA; Santa Monica, CA; Santa Barbara, CA; San Francisco, CA; Boulder, CO; Boulder County, CO; Seattle, WA; and Portland, OR. In addition, [Click Here](#) for access to the U.S. Green Building Council and their listing of green building programs nationwide.

Recommendation 3: Create an Exemption from Architectural Guidelines for Green Buildings

Context

- Green buildings contribute to overall community environmental impacts, and have healthier indoor air quality for occupants.
- The current architectural guidelines were created prior to the green building movement. They are extremely limited in their architectural vocabulary. High performance green building

cannot meet the decorative menu that the current architectural guideline dictates in several zoning districts.

- The current process is a deterrent to development and slows the process down. In many cases architects are forced to dumb down their designs to comply with antiquated guidelines. High performance green buildings have a design vocabulary all their own. These buildings cost more to incorporate sustainable strategies into the design. Costly decorative details are replaced with energy conserving strategies such as day lighting with a higher percentage of glass, low E insulated glass, solar thermal water heater systems, photovoltaic solar systems either flat panel or parabolic shaped systems, wind generating systems and unique form shapes which react to the solar path of the sun.
- It's a sad state of affairs when we must create an exemption to construct environmentally responsible buildings. Green buildings should be the norm not the exception.

Intent

To remove existing County disincentives / barriers to green design and construction.

Implementation

The County might create an exemption for green USGBC LEED certified silver or better buildings.

Best Practices Implemented in Other Jurisdictions

- Palm Beach County exempted itself from all of the architectural guidelines for their own projects. It is in the best interest of our environment that they extend the same exemption for green building in the private sector.

ADDITIONAL TOPICS AND IDEAS FROM THE GREEN BUILDING SUBCOMMITTEE

- Provide free public relations for building professionals who complete green buildings by featuring those buildings on County website and Channel 20.
- Recognize environmentally responsible companies doing business in PBC (similar to Sarasota County Green Business Partnership – [Click Here](#))
- Investigate mandating concrete washout disposal.
- Fast – track / front of the line permitting for green projects as an incentive program.

CHAPTER 7: ENVIRONMENT SUBCOMMITTEE RECOMMENDATIONS

The Environment Subcommittee focused on issues of environmental conservation in Palm Beach County, including existing protected lands, agricultural lands, and the importance of conservation planning strategies for economic development. The Committee focused on how to ensure that both the undeveloped land and urban areas were zoned and maintained in an environmentally responsible, sustainable, self-sufficient manner with a clear vision and process for maintaining the land for future generations and providing economic sustainability through the diversified Green Collar Economy.

ENVIRONMENT SUBCOMMITTEE RECOMMENDATIONS

Recommendation 1: Commit to Long-term Support of and Funding for the Existing Conservation Lands Maintenance Program

Context

- The County currently has a plan in place for conservation of natural, undeveloped lands and wetlands.
- This program has struggled for consistent support and funding.
- The County's undeveloped areas do not have consistent and assured protection and are in danger of being lost.

Intent

To conserve natural, undeveloped areas and wetlands.

Implementation

To take action on this recommendation, the County need only review its existing conservation planning documents and laws, and renew a commitment to adhering to these and funding this program.

Best Practices Implemented in Other Jurisdictions

There are over 20 counties in Florida that use local dedicated taxes for land conservation and maintenance (special taxing districts on property tax, funds not put into General Revenue on Annual budget—separate revenue source and line item).

Recommendation 2: Develop Policies to Preserve Agricultural Zoning and Encourage Urban Gardening

Context

- Palm Beach County is one of the largest producers of agricultural products east of the Mississippi River.
- Food supply (production and transportation of food over long distances) has a significant environmental impact in a variety of areas in the U.S.
- Local food production promotes the local economy and reduces the environmental impact of the County and its residents.
- The County hired a consultant to provide study on public markets (Palm Beach County Public Market Network: A Business Plan by Aaron Zaretsky), yet it is unclear what, if anything, has been done with this study. Such a network would help to promote a green and local agriculture in the County. This report should be available from the County.

Intent

To maintain and increase the amount of County land used for agriculture (both our existing agricultural infrastructure and an expansion in urban agriculture) as an important economic development opportunity and an important more sustainable alternative to reliance on importing foods.

Implementation

Suggestions for implementation are as follows:

Agricultural Reserve Zoning

- Maintain current agricultural zoning (do not allow variances for reduction of current levels of agricultural zoning) for food cultivation and ensure adequate food supply is available for residents in all circumstances.
- Provide incentives for organic farming, such as highest and best use of the land designation with property appraiser to encourage expansion of organic agricultural activity and increase in the amount of land used for agricultural purposes.

Urban Farming

- Expand opportunities in public spaces for organic community gardens, fruit tree orchards, etc.
- Revise residential zoning to permit organic urban farming.
- Create economic avenues and incentives for marketing local agricultural products grown in Palm Beach County urban gardens. Recipients might include: local produce stand vendors; companies producing value added products such as mango salsa; vegetarian / raw / vegan catering company being able to retain a permit to use a residential property for the business.

Best Practices Implemented in Other Jurisdictions

- Lake Worth has instituted a community garden at one of its parks. ([Click Here](#))
- Delray Beach has instituted a community garden at one of its parks. ([Click Here](#))
- [Click Here](#) for the American Community Gardening Association that has extensive information and location of gardens.

Recommendation 3: Develop and Implement Incentive Programs for Xeriscaping and Permaculture

(Please [Click Here](#) for information on xeriscaping and [Click Here](#) for information on permaculture).

Context

- Residential and commercial landscaping consumes huge amounts of water.
- South Florida, including Palm Beach County, has been struggling with water shortages and subsequent restrictions for years, and this is not projected to change.

Intent

To reduce the strain on County water supply and establish a sustainable eco-system.

Implementation

The Environmental Subcommittee is proposing a number of potential strategies for implementation including (but not limited to) the following:

Provide incentives. The listed components are not limited to the following:

- Develop incentive programs for:
 - Greywater Reuse
 - Rainwater harvesting
 - Use of drought resistant native plants and xeriscaping
- Develop a disincentive program for:
 - Use of traditional sod / grass

Best Practices Implemented in Other Jurisdictions

- The South Florida Water Management District has for many years now sought to promote xeriscaping. The SFWMD implemented a xeriscape incentive program in 1992 to work with local governments within its jurisdiction to promote and develop xeriscaping and xeriscaping ordinances. There is potential opportunity for the County to partner with SFWMD on this effort. ([Click Here](#))

- The State of Florida in its Code regarding municipalities notes the following:

166.048 Conservation of water; Xeriscape.--

(1)(a) The Legislature finds that Xeriscape contributes to the conservation of water. In an effort to meet the water needs of this state in a manner that will supply adequate and dependable supplies of water where needed, it is the intent of the Legislature that Xeriscape be an essential part of water conservation planning.

(b) "Xeriscape" or "Florida-friendly landscape" means quality landscapes that conserve water and protect the environment and are adaptable to local conditions and which are drought tolerant. The principles of Xeriscape include planning and design, appropriate choice of plants, soil analysis which may include the use of solid waste compost, practical use of turf, efficient irrigation, appropriate use of mulches, and proper maintenance.

(2) The governing body of each municipality shall consider enacting ordinances requiring the use of Xeriscape as a water conservation measure. If the governing body determines that Xeriscape would be of significant benefit as a water conservation measure relative to the cost to implement Xeriscape landscaping in its area of jurisdiction in the municipality, the board shall enact a Xeriscape ordinance. Further, the governing body shall consider promoting Xeriscape as a water conservation measure by: using Xeriscape in, around, or near facilities, parks, and other common areas under its jurisdiction which are landscaped after the effective date of this act; providing public education on Xeriscape, its uses as a water conservation tool, and its long-term cost-effectiveness; and offering incentives to local residents and businesses to implement Xeriscape landscaping.

(3) A deed restriction or covenant entered after October 1, 2001, or local government ordinance may not prohibit any property owner from implementing Xeriscape or Florida-friendly landscape on his or her land.

[Click Here](#) for more information)

- The State of Arizona has a greywater ordinance in place to permit and promote greywater use. [Click Here](#)
- The Florida Native Plant Society has created an extensive document, the Model Native Plant Landscape Ordinance Handbook, to help Florida municipalities create such legislation. [Click Here](#)

ADDITIONAL TOPICS AND IDEAS FROM THE ENVIRONMENT SUBCOMMITTEE

In addition to the three recommendations noted above, the Environment Subcommittee discussed the following other topics and recommendations:

- Promoting and developing incentives for private developers to use the LEED for Neighborhoods principles & certification that incorporate many concepts such as those developed in: Sustainable Urbanism, the Congress for the New Urbanism, and Urban Design with Nature.
- Developing Incentives for the development / redevelopment (utilizing sustainable design/construction practices) of the East of Military Trail as Urban Development Boundary
- Noting that Palm Beach County ranks 6th in the nation in suburban sprawl (according to the Palm Beach Post, 10/18/2002), West of Military Trail, increase impact fees for infrastructure such as Public Transportation routes, Agricultural land, Water Reuse, Rainwater Harvesting, etc. in order to reduce the Environmental Impact by reducing suburban sprawl.
- Implement requirements such that tree canopy is no less than 30%-50% (meaning that 30 to 50% of the land needs to be under tree canopy) in the Urban development/redevelopment areas and with technical approval from Urban Forester and Environmental Resource Management concerning removal/placement of trees, vegetation in areas of proposed development / redevelopment. Review current requirements, and work to increase the overall level of trees, and of that, increase the percentage of those that are native trees. See Lake Worth Tree Board Ordinances and American Forestry Report for Palm Beach County. A Tree Advisory Board was discussed as a valuable tool for best management practices. Some jurisdictions, such as Lake Worth and Sarasota, have such Tree Boards.
- Local Living/Closed Circle Economy/Zero Waste System best practices (ie. Production and access to goods and services within 100 mile radius, reduction/elimination of waste going to landfill, biodegradable products self-contained within residences or nearby location within walking distance)
- Requiring the location of any new construction/retrofitting within pedestrian access to Public Transportation that serves all Palm Beach County/Public/Essential facilities.
- There appears to be great potential for different types of renewable energy. One participant noted that according to some reports there is 12 million gals of recycled vegetable oil that is primarily used for soap. A focused study of the renewable / alternative energy opportunities in the County could be of great value.

CHAPTER 8: EDUCATION SUBCOMMITTEE RECOMMENDATIONS

The Education Subcommittee focused on opportunities to promote sustainability in Palm Beach County, and to educate people on how to make their everyday lives greener.

RECOMMENDATIONS

Recommendation 1: Fund and Help to Organize the Annual Green, Energy, and Climate Conference / Expo

Context

- The County currently has essentially no formalized green outreach effort, or effort to promote green businesses and growth in the “green collar job” sector.
- The 2009 Green, Energy, and Climate Conference / Expo was held in March at the Palm Beach County Convention Center in West Palm Beach.
- The County contributed funding and organizing efforts to this conference. There is an opportunity to participate in the future as this event grows and gains momentum.
- Green conferences and expos are now being held in communities throughout the country as an important piece to promoting green businesses and economic development locally.

Intent

To promote green business and lifestyle, while also growing the green job sector.

Implementation

- Contribute funding as a sponsor of the Conference in future years.
- Have a County representative serve on the Steering Committee for the conference.

Best Practices Implemented in Other Jurisdictions

- Sarasota County hosts an annual Sustainability Communities workshop. ([Click Here](#))
- Both Miami Dade County and the City of Miami provided sponsorship for the 2009 Mia Green conference in Miami. ([Click Here](#))

Recommendation 2: Develop and Maintain a Permanent Green Column on the Palm Beach County Government Website

Context

- The County has no formalized mechanism for communicating to constituents its own green activities.
- The County has no program for promoting green lifestyle, business, etc.
- The County has no way to promote or support green businesses in the County.

Intent

To provide a single resource for residents to learn about County green efforts, green policies that affect them, and other green living and economic development resources.

Implementation

Such a web resource might include links to and information about:

- PBC School District,
- PBCC, FAU, other Educational institutions,
- Community Gardens w/ maps/contact people,
- Chambers of Commerce in all cities,
- Service Organizations,
- All non-profits,
- Business Development,
- League of Cities,
- Residential Associations,
- Senior groups,
- Multicultural organizations,
- Moms Clubs,
- Eco Artists,
- Houses of Worship—churches, synagogues, mosques, temples, etc.,
- Other Artists, Writers, Performers, Musicians,
- Scientific Community,
- Agriculture,
- Horticulture,
- Tourism and Visitors Bureau,
- Real Estate,
- And others.....

These community links could be permanently on this column as an easy to find resource for all things Green/Sustainable for newcomers, permanent residents, and tourists to learn about the green initiatives and community in Palm Beach County.

The County could have a Kickoff Media Event and invite the media, community constituents, government elected officials, staff, general public., etc. This could be advertised on Channel 20 and all forms of mass communication. The intent is that the level of publicity campaign could be on par with and modeled after the information campaigns for hurricane safety.

Best Practices Implemented in Other Jurisdictions

- Sarasota County hosts dedicated green page with tips for residents and businesses, as well as information on the County's activities. ([Click Here](#))
- The City of Miami hosts a very expansive green website. ([Click Here](#))
- The City of Boynton Beach has recently begun its "Go Green Boynton!" site. ([Click Here](#))

Recommendation 3: Establish Green Collar Economy Enterprise / Cultural Training Centers Throughout Palm Beach County

Context

- The opportunity for green jobs is exploding, especially with initiatives from the Governor and State legislature, as well as the Federal Stimulus package
- There is currently no coordinated effort by the County to promote economic development in these areas in the County.
- The County Office of Economic Development has apparently done extensive work and drafted documents in this area, but nothing appears to have been implemented, and there appears to be a disconnect between various County departments exploring these issues.

Intent

To promote green job growth, especially for the at-risk / low-income community.

Implementation

The County could develop a program to first, identify what jobs will be needed in this growing sector, and second, develop training programs. This could be implemented especially in at-risk areas such as Pahokee, Riviera Beach and Boynton Beach, and it could utilize contaminated and/or historic buildings (such as old Boynton Beach High School) for hands on training in remediation and retrofitting the structures.

This could be open to everyone, but have an emphasis on returning veterans, released prisoners, At-Risk youth, and unemployed workers. Education provided by experts in their fields such as Green Engineers, LEED Contractors, Architects, Artists, Business, Chefs, Farmers, etc.

Best Practices Implemented in Other Jurisdictions

- The White House has recently appointed community leader Van Jones the Special Advisor for Green Jobs, Enterprise and Innovation. He has worked extensively in the area of green

jobs and authored the *Green Collar Economy*. ([Click Here](#) for more information and [Here](#) for an additional article on the promotion of the growth of the green jobs)

ADDITIONAL TOPICS AND IDEAS FROM THE EDUCATION SUBCOMMITTEE

- Development and Enhancement of Eco Tourism Sites and Historic Preservation/Archaeological Significance Sites. Palm Beach County has over 180 Archaeological sites that could be in danger of looting or environmental degradation. The sites serve as Educational/Economic opportunities for Eco-Tourism and Environmental Studies. Some sites are located in the Conservation Areas and must be maintained. References: Archaeological Survey of Palm Beach County Report--November 16, 2004
- Utilizing Eco Art as an Educational Vehicle ([Click Here](#))
- Implementing an Ongoing Comprehensive Outreach Program to engage and inform Palm Beach County citizens regarding Sustainability along with strategies for making permanent lifestyle changes – utilizing Public Affairs, Public Information Officers, Tabling at Events, Speakers Bureau, Media and other community resources/ activities



Palm Beach County Inventory of
Environmental Sustainability Initiatives
July 8, 2009

Prepared for:

Green Task Force

Prepared by

Department of Environmental

Resources Management

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Preface

On June 3, 2008, the Palm Beach County Board of County Commissioners (BCC) established the “Green Task Force on Environmental Sustainability and Conservation” under Resolution R-2008-1007. Their mission is to identify actions and policies that can be implemented by the BCC to encourage a healthier, more resource efficient and environmentally sustainable living through efficient buildings and natural resources conservation.

At the request of the task force, sixteen (16) county departments completed the U.S. Green Building Council, Florida Green Local Governmental Preliminary Inventory (See Appendix A). In addition, these same departments were asked to complete an internal inventory with the goal of identifying existing County initiatives related to resource conservation and environmental sustainability. Responses were compiled by the Department of Environmental Resources Management staff into this report entitled the “Palm Beach County Inventory of Environmental Sustainability Initiatives”. Participating departments are County Cooperative Extension, Facilities Development and Operations, Economic Development Office, Tourist Development Council, Fire Rescue, Housing and Community Development, Human Resources, Information Systems Services, Environmental Resources Management, Parks and Recreation, Planning Zoning and Building, Palm Tran, Metropolitan Planning Organization, Engineering and Public Works, Solid Waste Authority, and Water Utilities. The Palm Beach County Health Department also completed the inventory. Represented within are the responses to the following questions.

Questions

- 1) *Identify policies and practices which state Palm Beach County’s environmental commitment.*
- 2) *Describe any Recycle and Reuse practices in place to minimize landfill space.*
- 3) *What water conservation measures have been initiated by Palm Beach County?*
- 4) *List the County’s solid and hazardous waste reduction practices.*
- 5) *What Energy Conservation efforts in the County reduce energy use?*
- 6) *Identify initiatives to minimize greenhouse gas emissions, such as car pooling.*
- 7) *How does Palm Beach County promote “green” concepts (i.e., public education)?*
- 8) *List other County efforts by which Environmental Sustainability is achieved.*

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Palm Beach County Inventory of Environmental Sustainability Initiatives

1) Identify policies and practices which state Palm Beach County's environmental commitment.

County Administration

- The mission of the Palm Beach County Comprehensive Plan is to guide the growth of the County through encouraging growth in areas where there is the efficient use of County resources and to discourage growth in areas where there is either insufficient resources or where the County does not wish to extend those resources. Through the policies outlined in the Future Land Use Element, the Comprehensive Plan (Plan) seeks to preserve and protect natural and man-made resources, prevent urban sprawl, promote sustainable economic development and livable communities. In addition, the Conservation, Coastal Management, Utility, Transportation, and Recreation and Open Space elements have policies that seek to balance development with resources protection.
- In June 2009, Public Affairs launched the "Palm Beach County Go Green Initiative" web site for information and education regarding environmental sustainability. To view, go to pbcgov.com and click on the "Go Green" graphic.

Cooperative Extension

- Cooperative Extension is committed to providing research based education about sustainability in agriculture, horticulture, community and home, and encourages the adoption of such sound, sustainable practices.

Facility Development and Operation

- Increasing building efficiency and their use of energy, water, materials.
- Reducing impact on the environment through better building design, construction and maintenance.
- By using green building practices, beneficial objectives can be achieved and return a "best value" to the County.

Economic Development Office

- The Economic Development Office is committed to promoting the development of a resilient and sustainable economy identified in the 21st Century Palm Beach County Strategic Economic Development Plan.
- The Economic Development Office seeks to secure federal, State and local funding opportunities to assist the county in reducing fossil fuel emissions, improving energy efficiency countywide, increasing environmental sustainability and maximizing benefits to the community.

Tourist Development Council

- Eco-tourism marketing and promotion of sustainability.
- Encourage “green certification” in lodging industry.

Housing and Community Development

- All federally funded activities must receive prior environmental clearance through Housing and Community Development.

Human Resources

- Human Resources moved to a paperless office with online employment applications.

Information System Services

- Use of enterprise (centralized) data centers with energy efficient servers. Provides technologies that enable paper documents to be converted and stored in a digital format. Scanning function also offer Documents-on-Demand for electronic rather than paper reports and the Smead Link product is being implemented as an enterprise document management solution for County departments.
- Temperature settings in the Enterprise Data Center have been adjusted to a more optimum level. Multiple sensors have been installed to monitor temperature, humidity and air flow, and sends alerts.

Environmental Resources Management

- The Department’s primary mission is to establish, maintain and implement programs for the protection, preservation and enhancement of the land and water resources in Palm Beach County.
- Natural areas program for the purchase, land preservation, and management of more than 31,000 acres of environmentally sensitive lands and greenways, many under conservation.
- Environmental restoration programs for the enhancement and restoration of upland, freshwater, estuary, and marine habitats. Also includes a sea turtle protection program and implementation of a manatee protection plan.
- Environmental regulatory programs for protection of native vegetation, wellfield protection, groundwater and surface water protection. Includes, storage tank compliance and petroleum contaminated site clean-up activities.
- Countywide Information Network for Electronic Media Access (CINEMA) system is used for paperless file storage in the Petroleum Storage Tank Compliance and Petroleum Cleanup Programs.
- Coordinates the County’s National Pollutant Discharge Elimination Permit Compliance.
- Water quality monitoring program for protection of surface water.
- Active participation in comprehensive planning and county code and ordinance development and review.
- Invasive species removal on private and county owned and or managed land.
- Establishment of the Northeast Everglades Natural Area (NENA) trail system.
- Active volunteer network for exotic plant control and trash collection on county owned and/or managed land, native species planting, and reef monitoring.

Planning, Zoning and Building

- The Building Division is currently attempting to find partners within the County to apply for “stimulus bill” grants, which will provide for the alteration of existing buildings to include energy efficient and hurricane resistant features not typically found in older buildings.
- The Building Division meets with builders and developers as requested to discuss how Green Building proposals will impact or comply with current code requirements.
- The Building Division participates in discussions to promote “green building practices” including redevelopment which will help to preserve undeveloped properties and the provision of more efficient public transportation.

Parks and Recreation

- Stewardship of the park system through the management, planning and operation of native ecosystems. The goal is to preserve, protect and enhance the ecosystems unique natural functions and qualities and to further the public’s benefit in the utilization, understanding, appreciation and enjoyment of these areas. Accomplished by exotic removal and eradication (by mechanical, chemical, prescribed burning and hand methods), reforestation, lake and shoreline maintenance, wildlife management and wildfire prevention. These practices continue until restoration, reclamation, mitigation or development of the park property occurs.
- Proper protocol is followed during sea turtle nesting season (i.e, beaches are not mechanically cleaned). Wood, paper, tar, broken glass, plastic and other such materials are raked from the beaches. Debris is picked up by hand from dune vegetation. Seaweed is buried on the beach and acts as a fertilizer and stabilizer. (Palm Beach County Land Development Code - Coastal Protection; Parks Quality Standards Manual; Operations – Beach Cleaning PKO-D02)
- The collection of tropical fish (by any method) is prohibited within specific water bodies owned or managed by the Department. (Collection of Tropical Fish - DOO-029)
- Plants and tree donations from outside sources are accepted if they are native and in useable condition. Trees are trimmed and maintained for safety concerns with an added benefit of promoting healthy growth. (Operations – Tree and Plant Donations PKO-C05; Tree Trimming/Pruning PKO-C06)
- Chemicals are applied and maintained following the Florida Department of Agriculture & Consumer Services (Division of Agricultural Environmental Services) guidelines. (Operations – Chemical Applications PKO-A12)
- Boats are inspected and operated in adherence to U.S. Coast Guard guidelines. (Operations – Boat Operations PKO-D07)
- Vehicles and equipment are inspected and maintained for optimal efficiency. Staff adheres to Fleet Management’s “No Idling” policy. Staff is required to turn their vehicles off, if the transmission is in Park for more than 10 seconds. (Fleet Management CWO-035)

Palm Tran

- Adheres to policies defined under the Palm Beach County Comprehensive Plan, Transportation Element.
- Palm Tran is committed to the use of bio-diesel fuel.
- Operational, commuter alternative, and demand management strategies reduce demand, increase vehicle occupancy rates, and reduce greenhouse emissions in accordance with the comprehensive Plan.
- Sensitive to preserving the quality of the environment and in responding to air quality and energy conservation.
- Considers, promotes, improves, and increases, as appropriate, the use of transit as a viable alternative form of transportation.

Solid Waste Authority

- The Solid Waste Authority (SWA) provides the countywide integrated solid waste management system for Palm Beach County. The system, which is consistent with the Environmental Protection Agency's hierarchy of integrated soil waste management, includes renewable energy, recycling, source reduction, composting, and household hazardous waste programs, all of which are designed to minimize landfill disposal and protect the environment. See the Solid Waste Authority Integrated Solid Waste Management Plan, available at SWA.org.
- The SWA's Commitment to Environmental Quality commits our organization to seeking continuous improvements in environmental performance. The Authority's Environmental Management System provides the plan for achieving this objective.
- The SWA implemented Pollution Prevention Plans for every SWA operation.
- The SWA adopted a Countywide 50% Waste Reduction Goal.

Water Utilities

- Water Utilities adheres to the policies defined under the Palm Beach County Comprehensive Plan, Utilities Element which consists of three sub-elements: - Potable Water and Wastewater, Solid Waste and Storm water Management. The goals, objectives and policies are expressed in each of the sub-elements addressing the County's desire to maximize the use of existing facilities, correct existing deficiencies and promote a more efficient land use pattern and conserve and protect water resources.

Health Department

- Coordinate activities of the Pollution Prevention Coalition of Palm Beach County.
- Conduct outreach events promoting reduction of greenhouse gas emissions, air pollution, solid and hazardous waste.
- Promote reduction of green house gas emissions, air pollution, solid and hazardous waste during regulatory inspections.
- Work with industry during their permitting process to reduce air pollution, solid and hazardous waste. Examples: One industry because of their use of 1,1,1-trichloroethane as a degreasing solvent, was designated as a Title V Source subject to a federal Maximum Achievable Control Technology standard for area sources. Over the years, the Pollution Prevention (P2) Coalition and the Palm Beach County Health Department have worked with this industry in finding an alternative to this cancer causing solvent. The overall benefit of the project included the emission reductions and the re-classification of the facility from a designated Title V Source to a synthetic minor source; Another industry with which the Palm Beach County Health department has been working on reducing emissions, were also using 1,1,1-trichloroethane as a degreasing solvent. This industry implemented a process change that included the replacement of the 1,1,1-trichloroethane degreasing units with a system that does not emit a hazardous air pollutant. The overall benefit of the project included the emission reductions and the re-classification of the facility from a designated Title V Source to a synthetic minor source; Work with the sugar industry to use the by-product bagasse, as an alternative fuel.
- Installed satellite systems to downlink training courses from Universities, Environmental Protection Agency, Food and Drug Administration and other private and public agencies. This resulted in a saving of time and money on travel for office conferences and training purposes.
- Conduct presentations to communities, school children and industries.
- P2 Coalition conducts mandatory training for middle and high school science teachers in Palm Beach County on greenhouse gas reduction or reduction or non point source pollution, energy conservation and other pollution prevention concepts.

2) Describe any Recycle and Reuse practice in place to minimize landfill space.

Cooperative Extension

- Office recycle and reuse strategies include recycling paper, plastic bottles, and beverage cans, printer cartridges, cell phones, composting and water collection through rain barrels.

Facility Development and Operation

- All paper products in restrooms are from recycled paper.
- All offices have recycle bins for paper products.
- Areas that accept aluminum have collection bins.

Economic Development Office

- Internally, recycles all paper products and used toner cartridges.
- Plans are in place to assist with renewable energy technologies.

Tourist Development Council

- Tourist Development Council and agencies print on front and back of pages in all documents, if possible.
- Use of recycled paper products where ever feasible.
- Reuse paper printed on one side as scratch paper.

Fire Rescue

- Paper, cardboard, and plastic recycling at all stations and office buildings.
- Used fluorescent light bulbs from stations are recycled by bringing them to the Solid Waste Authority.
- Fleet mechanic shop rags are laundered and reused, not disposed.
- Vehicle batteries are recycled with vendor.
- Replacing used incandescent bulbs at stations with fluorescents as they burn out.

Human Resources

- Paper recycling.

Information System Services

- Waste paper is collected in recycling bins.
- Bins have been placed in break rooms for collecting aluminum and plastic containers.
- Used print cartridges are recycled.

Environmental Resources Management

- Using recycled copy paper.
- Recycling bins for plastic bottles and aluminum cans.
- Recycling bins for paper.
- Recycling of toner cartridges.
- Providing recycling bins at department-sponsored events.
- Use of biodegradable bags for seedling give-a-ways.
- Recycling of used pesticide drums.

- Reuse of clean concrete debris by the Artificial Reef Program.
- Toughbook computers are used by Petroleum Storage Tank Program field personnel reducing paper usage.

Planning, Zoning and Building

- Recycle paper, plastic, aluminum cans and glass.
- Standard operating practice is to utilize 2-sided copying for documents, unless impractical for the use, so each document sheet is reused on the back.
- Return used toner cartridges for recycling.
- Purchase recycled copy paper.

Parks and Recreation

- Paper products are recycled.
- Used motor oil, old radios, tools and batteries are collected for recycling.
- Playground components, chain link fencing, sign blanks and athletic field lighting parts that are in good condition are reused and reinstalled throughout the Park system.
- Scrap metal material (i.e., unusable sign blanks, sign posts, gates) is taken to a recycling vendor for future credits.
- Collaboratively work with other county departments to recycle products no longer used (i.e., spray paint cans given to Facilities; cleaning solvents stored at maintenance compound distributed to Parks Districts).

Palm Tran

- All cans, bottles and newspaper found on the bus are recycled.
- All cardboard is recycled as well as office paper.
- All tires possible are recapped and reused.
- Recycles used oil, oil filters, scrap metal, and freon.

Engineering and Public Works

- Recycle all paper and paper products.
- Recycle all plastic containers and aluminum products.
- Recycle tree trimmings from maintenance as mulch.
- Mowing maintenance contracts require all contractors to collect and document litter. The contractors and staff recycle recyclable items (such as metals) whenever possible. Relocate and rehabilitate damaged/diseased trees for reuse, rather than simply disposing of such trees.
- Streetscape utilizes compost produced by Solid Waste Authority (SWA) in our tree holding area. Efforts to use SWA will be expanded to the greatest practicable extent.

Solid Waste Authority

- Internally, provides fiber and commingle recycling at all facilities.
- Internally, recycles tires, metals, motor oil, lubricants and other materials from its operations.
- Internally, purchases paper products with recycled content (Procurement).
- Internally, recycles used printer cartridges.
- Internally, uses Alternative Landfill Daily Cover materials (Landfill Operations).
- Internally, requests all proposals be presented on recycled content paper (Procurement).
- Externally, provides an integrated solid waste management and recycling system for Palm Beach County. See the Solid Waste Authority Integrated Solid Waste Management Plan which is available at SWA.org.

Water Utilities

- Recycles waste office paper.
- Used oil and filter recycling.
- Acid Battery recycling.
- Recycle metal electrical component wastes.
- Bio-solids from the Southern Region Water Reclamation Facility converted through pellitization into fertilizer.

Health Department

- Employees recycle paper, cardboard, bottles, plastic and aluminum cans.
- Department is trying to go paperless in many of its administrative activities.
- Employees are discouraged from printing emails.
- Work with communities through the Protocol for Assessment of Community Excellence Environmental Health (PACE EH) program in implementing these practices.

3) What water conservation measures have been initiated by Palm Beach County?

Cooperative Extension

- Water conservation strategies include awareness of water use and efforts to reduce, proper setting of sprinkler system, greater use of drip and micro irrigation, mulch and compost and a greater use of native and drought tolerant plants.

Tourist Development Council

- Building uses water conservation practices.

Facility Development and Operation

- Faucet Aerators.
- Self-closing Faucets.
- Push-button Metering Faucets.
- Fleet truck wash stations recycle water.

Fire Rescue

- Lawn irrigation at stations per South Florida Water Management District restrictions.
- Pump testing (hose testing) at Head Quarters pond location and water is returned to source.

Environmental Resources Management

- Developed the Water Conservation and Irrigation Ordinance No. 93-3 to protect water resources from wasteful irrigation practices.
- Support South Florida Water Management District watering restrictions by educating public on restrictions and water conservation techniques.
- Reduction of an already limited use of temporary irrigation for new planting.

Planning, Zoning and Building

- Water conservation is an important aspect of the *Florida Building Code, Plumbing*. Volume is enforced by the Building Division; in limiting water requirements for toilets and requiring

heating devices in commercial applications so the water expended while waiting for hot water to come from the tap is minimized.

- The Building Division spearheaded the adoption of an “Irrigation Ordinance” with a main thrust for conservation of water, and protection of our drinking water system.

Parks and Recreation

- Installing, calibrating and monitoring flow meters on irrigation systems throughout the Parks system. Nineteen (19) new flow meters have already been installed.
- Weekly inspections are being conducted on irrigation systems throughout the Parks system including those under the control of user groups and outside entities. Systems are checked for broken or clogged heads and leaks. Coverage zones are checked for adequate coverage to prevent over/under-watering. Daily checks are made to make sure common area or athletic field sprinklers are not running too long.
- Installing automatic shut off faucets for all showers, fish cleaning tables and other plumbing fixtures throughout the Parks system.
- Use of extremely drought tolerant Bermuda turf grass called “Celebration” on all multipurpose athletic field renovation projects in place of the existing Bermuda Tifway 419.
- Using organic fertilizer wherever possible and fertilizing only on watering days.
- Bahia turf grass is being used in place of St. Augustine turf grass on common areas wherever possible.
- Washing of equipment and vehicles has been decreased and is performed on an as needed basis.

Future Water Reduction Projects

- Install low flow faucet and shower head (where applicable) aerators in restrooms. Low flow aerators can reduce water usage by 50% without compromising performance.
- Study the practicality of waterless urinals.
- Consider the removal of plants in certain high traffic areas and use of Xeriscape or comparable method to reduce plant replacement costs and unnecessary watering.
- Considering removing the heads and capping off irrigation systems in areas with well established hedges, shrubs or small plants.
- Research use of reclaimed water for athletic and park irrigation systems.
- Investigate the use of drip irrigation systems on hedges and plant materials.

Palm Tran

- Installed water reclaim systems at both facilities bus wash systems.
- Installed automatic waste water treatment systems for bus chassis wash area.

Engineering and Public Works

- Complies with all South Florida Water Management District water use restrictions. Whenever possible, irrigation is scheduled to occur at night, when less evaporation will occur. “Smart” telemetry-controlled irrigation enables us to achieve maximum irrigation efficiency.
- Whenever possible, drought tolerant species of native trees are utilized to reduce the need for supplemental irrigation. Drought tolerant native grasses are also being utilized to reduce the need for supplemental irrigation.
- Trees and palms are maintained with mulch around their bases in order to reduce the need for irrigation and to control weed growth.
- Reduction of vehicles brought to car wash.

Solid Waste Authority

- Installation of a reclaim water system for truck washing (Equipment Maintenance).

- Interceptor water for cooling water at the Waste-to-Energy Facility (Plant Operations).
- Extensive use of native vegetation at all facilities (Landfill Operations/Grounds Maintenance).
- Plan to use reclaim water from East Central Regional for cooling water and other water conservation measures at the planned Mass Burn Renewable Energy Facility.
- Installation of Automated water faucets in washrooms.
- Pursuing Leadership in Energy and Environmental Design (LEED) Certification for the new Operations Building, which includes water conservation measures.

Water Utilities

- Maintains a strong reclaimed water program that at this time recycles approximately 60%, on average, of the wastewater produced.
- Encourages the use of reclaimed water by providing a 20% discount to normal rates for lake delivery service.
- Palm Beach County Water Utilities (PBCWUD) customers in the Village of Royal Palm Beach are charged a conservation charge that equates to 150% of the gallonage rate per 1,000 gallons of usage for all usage in excess of the authorized number of gallons per month for their customer class to encourage water conservation.
- PBCWUD customers outside of the Village of Royal Palm Beach, both residential and nonresidential pay water and wastewater commodity fees per 1,000 gallons of usage in tiered fashion to encourage conservation. The higher usage, the higher the monthly utility fee.
- Reclaimed water for irrigation is mandatory for any new development with Mandatory Reclaimed Water Service Areas (MRWSA) in Palm Beach County.
- The use of reclaimed water for irrigation is mandatory for all new development upon all or any portion of property located outside the MRWSA but within 300 feet of a reclaimed water distribution main.

Health Department

- Promote water conservation measures through the distribution of shower timers, toilet water balloons during outreach events.
- Work with communities through the Protocol for Assessment of Community Excellence Environmental Health (PACE EH) program in implementing these practices.

4) List the county's solid and hazardous waste reduction practices.

Cooperative Extension

- Solid and hazardous waste reduction strategies include proper disposal of horticultural and agricultural chemicals, cleaning chemicals, educating growers in this regard and recycling of paper.

Tourist Development Council

- Printer cartridges recycled as much as possible.

Fire Rescue

- Refrigerants, oils, Freon, antifreeze (biodegradable), and aluminum scrap are recycled by contracted vendors.
- Used oil filters are crushed and reused for scrap by vendor.
- Use of synthetic oil in vehicles which lasts longer, does not need replacing as frequently.
- Retread tires used whenever possible instead of new.

- “Kitty-litter” style oil stain remover was replaced with biodegradable soap wash and one small disposed towel.

Facility Development and Operation

- Vendors on contract to dispose of hazardous waste (e.g., old bulbs, ballasts, batteries, etc.).
- Solid Waste Authority receives small controlled quantities of used oils, paints, and chemicals.
- HVAC Refrigerant Reclaim-Recycle Program in place with vendors on contract.

Information System Services

- Use of electronic records stored in a central database, when possible, rather than paper reports and documents.
- Double-sided printing of reports, when possible.

Environmental Resources Management

- Using environmentally safe chemical larvicides for treatment of mosquitoes in coastal areas and control of aquatic exotic vegetation.
- Using aerial adulticide spray techniques reducing chemicals usage by 75%.
- Using predaceous mosquitofish (*Gambusia spp.*) as a larval biocontrol agent.
- Installation of Global Positioning Systems into Ultra Low Volume ground trucks that guide a driver through a prerecorded spray route which prevents over spraying streets within residential areas.
- Reduced the use of formalin.

Planning Zoning and Building

- Minimize waste by using less paper in our kitchens, using and washing utensils and dishes.
- Minimize solid waste by sending information electronically, rather than sending paper.

Parks and Recreation

- Launched a “Carry out What You carry in” trash program. Trash cans have been removed from selected parks and individual trash bag dispensers are provided in several convenient locations so visitors can collect trash they produce in the park and carry it home for proper disposal.
- Phasing out harsh/toxic chemicals (i.e. Sheila Shine) & lead based paint for less toxic, more environmentally friendly alternatives. This has resulted in an added benefit of eliminating the contaminated “red rag” cleaning service.

Palm Tran

- Recycle paint wastes.
- Require 2-sided copies unless otherwise required.
- Use back of single-sided copies for drafts and working papers.

Engineering and Public Works

- Recycle scrap metal.
- Recycle used oil.
- Recycle tires.
- Recycle used batteries.

Solid Waste Authority

- The Waste-to-Energy (Renewable Energy) Facility reduces the managed waste by 60% by weight, recovers ferrous and non-ferrous metals and produces electricity.
- Operates a Residential Materials Recycling Facility and a Commercial Materials Recycling Facility.
- Partnered with several large utilities to construct and operate the Biosolids Pelletization facility that converts dewatered sludge into sludge pellets for use a fertilizer additive.
- Owns and operates a Compost Facility that composts mulch produced from vegetative waste and wastewater sludge into a Class A horticultural product.
- All excess vegetation is delivered to a renewable energy facility or used as a soil amendment.
- Permits private sector building debris and yard waste recycling operations.
- Extensive use of electronic report distribution.

Water Utilities

- Has an active wastewater pretreatment program in place to regulate the discharge of hazardous, toxic or unusually strong discharge of chemicals into the wastewater collection system, regardless of volume to prevent the introduction of pollutants into the collection and treatment systems, which could interfere with the operation of the utility system, contaminate the resulting sludge, or pass through into receiving water bodies.
- Asbestos waste disposed of through licensed contractors to meet state and federal regulations.
- Properly dispose of mercury waste from electrical switch gear through licensed contractors to meet state and federal regulations.
- Properly dispose of flammable liquid and solids, organic laboratory chemicals, caustic chemicals, toxic chemicals, and poisons in accordance with all state and federal regulations through licensed contractors.
- Administer an aggressive industrial pre-treatment program that includes oil and grease generated by industry and/or commerce.

Health Department

- Promotes reduction of solid and hazardous waste through its licensing program, less waste leads to less licensing fees.
- Promotes reduction of solid and hazardous waste during regulatory inspections.
- The department through its licensing program promotes reduction of solid and hazardous waste. In other words less waste leads to less licensing fees.
- The Pollution Prevention (P2) Coalition recognizes industries which implement different strategies in processes that reduce environmental impact.
- Conducted a workshop with the assistance of the Florida Department of Environmental Protection for Auto Salvage yards to reduce waste.

5) *What Energy Conservation efforts in the County reduce Energy use?*

Cooperative Extension

- Energy Star appliances, keeping thermostat set at 74 degrees, turning out lights when not in a room.

Tourist Development Council

- Meetings are scheduled during normal working hours to reduce energy use.

- Use of green technology office equipment.

Facility Development and Operation

- Developing and building new and remodeled projects to energy efficient standards producing a reduction in electricity, carbon dioxide, emissions, water consumption and solid waste.
- Selection of energy efficient Heating Ventilation and Air Conditioning (HVAC), lighting and heating systems based on life cycle cost analysis. Reduction in hot water heaters, use of building automation systems and energy management systems.
- Use of high efficiency HVAC Chillers, Variable Frequency Drive motors reducing the high startup energy consumption, improving system performance by adjusting to load demand conditions.

Economic Development Office

- Turning lights off when rooms are not in use.
- Using e-mail as much as possible for business activities.

Fire Rescue

- Indoor lights in Head Quarters and Support Service buildings on motion activation sensors turn on/off automatically based on activity.
- Stations have outdoor photocell lights; turn on automatically at night only.
- All bulbs are energy star compliant.

Planning Zoning and Building

- Shuts lights off at night.
- Automatic shut down of computers at night.

Information System Services

- Implement recommendations presented in April 2008 energy usage study conducted by Information System Services.
- Planning to evaluate the feasibility of changing our evening update and software distribution processes in a way that will facilitate the practice of turning off devices every evening. Employees will be encouraged to comply with this practice, as well as other green practices referenced in this survey.

Environmental Resources Management

- Requests alternative fuel vehicles for the county fleet whenever possible.

Parks and Recreation

Fuel Reduction

- Installing a Central Control Irrigation System on existing systems which allows for remote access and control via computer, therefore eliminating the need to travel to the site resulting in fuel savings.
- Above ground fueling tanks have been installed at several sites throughout the Parks system. Fueling of equipment and gas dispensing at these sites has resulted in a reduction in staff traveling and fuel savings.
- Fuel reports are being scrutinized for irregularities and overall reduction in fuel consumption. Unusual activity is being flagged and researched.
- Vehicles and equipment are regularly inspected and maintained so that they are at optimal performance.

- Decreased maintenance frequency has resulted in a reduction in equipment use: mow every 10 days (instead of weekly); perform aesthetic trimming, edging, etc. quarterly; collect litter and debris every other day; perform heart trail and pathway mulching once a year. Athletic fields are conditioned once per day; infield renovations are completed every 9 months. As an additional cost/fuel savings the process has already begun to have athletic field materials delivered directly to the job site. Put garbage crew on a four 10 hr/ day work week. Work routines are analyzed for maximum efficiency and fuel savings.
- Vehicles have been downsized therefore saving fuel. Numerous caretaker vehicles were downsized from large trucks to utility carts.

Future Fuel Reduction Projects

- Hybrid/smaller vehicles will be replacing large vehicles wherever possible.
- Staff will be encouraged to get direct deposit. This would eliminate the need to have staff deliver paychecks to satellite offices.

Electricity Reduction

- Light motion sensors have been installed at John Prince Park Maintenance Compound.
- Staff has been directed to power off all computer/peripheral equipment at the end of their shift.
- Fluorescent lighting fixtures or reduced light fixtures are being used wherever possible. For example, security lighting fixtures have already been reduced at Caloosa Park press box.

Future Electricity Reduction Projects

- Light motion sensors will be installed in the interior of buildings throughout the Parks System wherever possible.
- Conscientious effort will be made to encourage staff to turn off lights when not in use. Signage reminding staff to "Turn it off" will be posted. Every effort will be made to shut down lights in unused areas in the Parks.
- Encourage staff to raise the thermostat level whenever the building is not occupied.
- Work with Athletics and Park Ranger staff to monitor athletic field lighting during non-usage periods and make adjustments to timers.
- Where practical, lighting timers will be installed in building interiors.
- Continue installing the "Control Link" system to better control athletic field lighting.
- Investigate the use of motion detectors on security lighting around buildings.
- Work with Florida Power and Light to reduce electricity consumption (i.e. Installing Seasonal Demand Time of use Rate meters)
- Inspections have been implemented of all restrooms to make sure the faucets and toilets are working properly and do not run constantly or drip.

Palm Tran

- Added tint to all lobby windows.
- Turns off lights in unoccupied offices.

Engineering and Public Works

- Use of hybrid vehicles.
- Sets Air Conditioner at higher temperatures.
- Uses automatic lighting.
- Reduced contracted mowing maintenance frequencies. Station large vehicles at secure locations near work sites and use smaller vehicles to drive employees from office to the work sites.
- Uses telemetry-controlled irrigation systems with rain shut-off sensors to avoid unnecessary irrigation.
- Uses Light-emitting Diode (LED) traffic signals.
- Turns off equipment and lighting when not needed.

Solid Waste Authority

- Computer control of the HVAC system in the Administration Building (Engineering).
- Replacing light fixtures with more energy efficient light fixtures (such as T-8 for T-12).
- Purchase of Hybrid Vehicles where appropriate (Equipment Maintenance).
- Use of landfill gas to power the sludge dryers at the Pelletization Facility (Engineering).
- All facilities on the Jog Road campus are powered by the Resource Recovery Facility (Renewable Energy Facility).
- Transfer Stations reduce mileage, fuel consumption and emissions (Chief Operating Officer).
- Pursuing Leadership in Energy and Environmental Design (LEED) Certification on the new operations building.

Water Utilities

- There are light motion sensors in all stairwells.
- Designing ozone treatment systems at Water Treatment Plant (WTP) No. 2 with magnetic Ion Exchange, a more energy efficient process.
- Eliminated concentrate water booster pumps at WTP Nos. 3 and 9.
- Using high efficiency motors at all pumping facilities.
- Adjusted operation of membrane treatment plants for greater efficiency of operations.
- Implemented FPL interruptible rates at 5-Water Utility facilities and adding 3-additional facilities at this time.
- Adjusted pump impellers system-wide to allow for more efficient operation of raw water pumps.

Health Department

- Use energy saving measures in computer usage and purchases.
- Purchased the Honda Insight to promote a change in the peoples thinking towards energy conservation. The program has been successful and hybrids are now recognized as the fuel efficient, greenhouse gas reduction vehicle.
- Promote energy saving driving habits in outreach events.
- Conduct outreach events to promote energy conservation.
- In coordination with academia, conducted car clinics during the car care month and Clean Air Month.
- TV presentations promoting car care and alternative energy usage.
- Used pump toppers in gas stations to provide guidance to motorists on how to achieve good gas mileage in their vehicles
- Advertised on the outside of Palm Tran buses guidance to motorists on how to achieve good gas mileage in their vehicles.
- Energy saving was achieved when gas and time was saved using the satellite systems to downlink courses for employees seeking to advance their educational career. This resulted in the department benefiting from qualified employees in public health, engineering, environmental science and geology.

6) Identify initiatives to minimize greenhouse gas emissions, such as car pooling.

Cooperative Extension

- More fuel efficient vehicles, car pooling, educating the community about how to reduce emissions by reducing car trips, considering the purchase of a more fuel efficient vehicle, planning landscapes wisely to reduce mowing of large lawn areas.

Facility Development and Operation

- Advocates car pooling for employees when possible. Encourage employees to utilize Palm Tran and Tri-Rail on their way into work.

Economic Development Office

- Alternate work schedules are being utilized.
- Carpooling to sites when possible.

Tourist Development Council

- Staff car pools to work and to off-site meetings where possible.

Fire Rescue

- Staff members may choose to work 4-10 hour work days, decreasing their vehicle emissions.

Human Resources

- Involved with South Florida Commuter Services to promote van and car pooling throughout the County.

Information System Services

- Allowing employees to selection 4-10 hour work days as a workweek option. The 4-day workweek is scheduled by almost 40% of our work thereby cutting the number of trips for these employees by 20%.

Environmental Resources Management

- Native seedling giveaways at events such as the South Florida Fair.
- Native planting on county owned and/or managed natural areas.
- Regulatory requirements for planting of upland and aquatic vegetation.
- Encouraging 4 - 10 hour work days to reduce fuel consumption.
- 10 employees carpool to work.
- Proposal sent to Administration for consideration of a shuttle from the West Palm Beach Tri-Rail to Vista Center to encourage staff to use public transportation to commute to work.
- Co-sponsoring "Bicycle Week" events.

Planning Zoning and Building

- Use of hybrid vehicles.
- Few employees take tri-rail, some employees car pool.

Parks and Recreation

- Reduced size of fleet and equipment and encourage ride and equipment sharing.
- Decentralized operations have resulted in a more productive work force and fuel costs savings: increased from 5 locations to 21 throughout the County. Every effort was made to locate staff near their home. This has also improved staff morale by saving our employees money on fuel costs on their personal vehicles.
- Daily work assignments are now distributed at the end of the workday. Therefore, staff is able to leave early in the morning to avoid rush hour traffic. Staff working in the early hours of the morning, results in fuel savings and a more productive work force.
- Every effort is made to schedule tasks and staff together to facilitate car pooling whenever possible.
- Car pooling is encouraged wherever possible for any department/division events.

Palm Tran

- Using bio-diesel in all 141 buses, purchased 3 hybrid buses.
- Installed nitrogen in all vehicle tires.
- Converted 10 buses from hydraulic fans to electrical increasing MPG by 12%.
- House the local representative of the regional van pool program who is included in various events to promote alternative modes.
- Several staff members work 4 days.
- Some staff carpool on occasion. One staff person bikes to work on occasion.

Engineering and Public Works

- Plant trees and grass in roadway locations. Well-maintained trees and turf grass remove carbon dioxide and other pollutants from the air.
- Staff utilizes the most energy efficient appropriate vehicles/equipment possible to perform work for given situations.
- Staff car pools to remote work sites when possible.
- Many of our staff works 4-10 hour day work weeks.
- Minimizes driving.

Solid Waste Authority

- Usage of Biodiesel in the tractor trailer fleet and heavy equipment.
- Purchase of Hybrid Vehicles where appropriate (Equipment Maintenance).
- Replacing light fixtures with more energy efficient light fixtures (such as T-8 for T-12).
- Landfill Gas Collection System to reduce greenhouse gas emissions (Chief Operating Officer).
- The Waste-to-Energy facility produces energy from biomass reducing the consumption of fossil fuels (Chief Administrative Officer).
- Transfer Stations reduce mileage, fuel consumption and emissions (Chief Operating Officer).
- SWA is pursuing Leadership in Energy and Environmental Design (LEED) Certification on the new operations building.
- Flexible work day schedules (e.g., 4-10 hour days and 3 thirteen hour days).

Water Utilities

- Staff carpooling.
- Use methane as a heat source for the digesters at Southern Region Water Reclamation Facility.
- Use low sulfur diesel fuels for heavy equipment operation and electric generators.
- Odor control scrubbers at Southern Regional Water Reclamation Facility.

- Extensive air quality monitoring program to minimize the potential for pollutant emissions at Water Utilities Department's facility generators and air blowers.
- Odor control at major wastewater collection and transmission facilities.
- Established alternate work scheduling for department employees.

Health Department

- Employees are encouraged to use public transit or car pool.
- Walk to lunch or carpool.
- Policy requires mandatory use of a hybrid vehicle for long distance trips.
- Promote Florida Department of Transportation's share a ride program.

7) How does Palm Beach County promote "green" concepts (i.e., public education)?

Cooperative Extension

- Promotes "green concepts" in nearly every program and exhibit and through the more than 2,200 printed publication titles distributed to the public. The living examples found in the Mounts Botanical Garden attempt to exemplify "green" concepts unique to South Florida.

Facility Development and Operation

- By using green building practices, beneficial objectives can be achieved and return a "best value" to the County. Whenever members of the public visit our buildings they not only see the various green concepts utilized within the buildings, but get a sense of the satisfaction knowing that we are playing a part in promoting energy conservation.

Economic Development Office

- The Economic Development Office will be creating educational programs and opportunities that will highlight "green" project activities as they are developed county wide through the use of the U.S. Department of Energy's Energy Efficiency Conservation Block Grant Program.
- The Economic Development Office will share information, collaborate on lessons learned and successes in resource technologies as well as other energy matters with the Florida Energy and Climate Commission for the U.S. Department of Energy's Energy Efficiency Conservation Block Grant Program.

Tourist Development Council

- There are currently 36 hotels and lodging facilities in Palm Beach County that are "Green" certified.
- Held first meeting with attractions, hotels and others to set up north county eco-cluster.
- New \$296,500 Eco-tourism marketing campaign largely on the internet.

Information System Services

- Recommending to management that consolidated data centers be utilized rather than multiple stand-alone data centers which require more floor space (air conditioning, lighting), more servers, printers, and other devices (energy usage and equipment duplication), as well as staffing costs.
- Use of double-sided copying and printing, when practical.

Environmental Resources Management

- Provides awareness events and workshops for elected officials and public that include "green" concepts related to various environmental matters.
- Provides quarterly newsletters, brochures, technical presentations, speaker's requests, awareness through the website, press releases and participation at numerous events annually on multiple environmental issues.
- Provides environmental and Geographical Information System (GIS) data through the website, state database, number of interactive applications, or through public records request.

Planning Zoning and Building

- Infill Redevelopment Overlay promotes green site planning principles (Zoning).
- Where the Building Code allows a green concept, we encourage builders to use it.
- The Building Division provided a "Green Building" information display at our annual "Building Safety Week" activity, and participates in the green building public expos of other agencies.
- The Building Division is working through the Building Code Advisory Board and the PBC Building Official's Association of Florida to encourage education of its members and code amendments to address the new technology.
- Our website offers information on green building practices and resources.

Parks and Recreation

- Investigating the use of green light technology for athletic fields and parking lots.
- Given presentations on Natural Areas Management issues (i.e. fire ecology/prescribed burns; ecosystem diversity, restoration, reclamation, maintenance and exotic plant control) to schools, Earth Clubs, summer camp attendees and the general public. Assisted Eagle scouts with various planting projects.
- The department promotes green concepts by researching and development of innovative materials that will extend usage while saving the environment.

Palm Tran

- Transportation plans promote alternative modes for travel and included in public outreach efforts.

Engineering and Public Works

- Public outreach and education through contact with homeowner groups.
- The dredge section moves sand to clear inlets and reestablish beaches.
- Active involvement and support of Keep Palm Beach County Beautiful, Inc. and its programs and environmental stewardship initiatives.
- Adopt A-Road program implemented to clean up right-of-ways.

Solid Waste Authority

- Extensive public education program through the mainstream media and in the schools (Recycling Department).
- Active Employee Suggestion Program that rewards employees for ideas to save money, reduce waste or improve safety (Executive).
- SWA's Environmental Management System (Chief Administrative Officer).
- Supports commercial and residential recycling through waste audits, onsite tours and presentations (Recycling Department).

Water Utilities

- Provide free water conservation and leak detection kits.
- Created and distribute "Water Wisely" brochure.
- Recycle old uniforms and jeans into quilts.
- Maintain created wetlands in Wakodahatchee and Green Cay using reclaimed wastewater.
- Holds a wetlands day every year for the public to educate them on wetlands and wildlife.
- Website that links the viewer to water conservation information.
- Channel 20 expose on the Wakodahatchee Wetland and the Water Cycle.
- Water Quality report distributed annually to Water Utility customers that includes water conservation information.
- Recycling and utilizing recycled paper.

Health Department

- Educate communities through the Protocol for Assessment of Community Excellence Environmental health (PACE EH) program in the benefit of practicing green concepts and programs implementing these practices.
- Visits to schools to give classes on this subject
- EPA staff presented a workshop to local agency representatives on different ways of address reduction of green house gas emissions.
- Seminar in green building concepts for staff of county agencies and arrived at a summary of action plan was provided.
- Outreach events promoting green cleaning and green practices in buildings.
- Introduced and promote the state's anti-idling policy.

8) List other County efforts by which Environmental Sustainability is achieved.

Cooperative Extension

- Agricultural sustainability is paramount to the continuation of the industry. Best Management Practices (BMP) and Integrated Pest Management (IPM) make sense economically and environmentally. These concepts are routinely taught and embraced by the industry. These concepts are practiced in the Mounts Botanical Garden. Children embrace sustainability concepts through experimental learning projects through the 4-H Youth Development Program.

Economic Development Office

- The Economic Development Office will measure greenhouse gas emissions and energy reduction for project activities supported by the U.S. Department of Energy's Energy Efficiency Conservation Block Grant Program.
- Active participation in and coordination of the Palm Beach Energy County/Cities Collaborative.

Tourist Development Council

- Working to encourage more hotel and lodgings to become "Green" certified.
- Collaboration with the Department of Environmental Resources Management to promote Eco-marketing with eye to sustainability and growth.

Fire Rescue

- Future rebuild of Station 31 will be a LEED certified building.
- All stations are currently undergoing energy audits by FPL to determine areas of improvement.

- Participation in the Florida Power and Light “On Call” program for electricity conservation.

Facility Development and Operation

- Renovation projects are performed to current energy star ratings, Federal Energy Management Program (FEMP) and code guidelines.
- Working closely with FPL to participate and benefit from their many incentive programs.

Information System Services

- Establishing an energy awareness program to educate and mobilize employees to generate ideas and institute practices that save energy. (Planned – may require assistance of energy consultant – e.g., Florida Power and Light.)
- Requesting separate metering of 4th floor data center in the Governmental Center to measure electricity usage and establish a baseline for future improvements.

Environmental Resources Management

- Supports task forces and advisory boards, such as the Green Task Force, Natural Areas Management Advisory Committee, Land Use Advisory Board, and Artificial Reef and Estuarine Enhancement Committee, Lake Worth Lagoon Initiative, and Groundwater Natural Resources Protection Board.
- Active participation and serving as an officer for Florida Local Environmental Resources Agencies (FLERA).
- Active steering committee member for Palm Beach County National Pollution Discharge Elimination System.
- Monitoring and commenting on State of Florida legislative environmental issues.
- Participation in Pollution Prevention Coalition activities for clean air, water and energy conservation.
- Regulatory programs also promote “Best Management Practices” to business and development communities.
- Ecotourism promotion through participation with the Tourist Development Council and coordination with tourism agencies in Palm Beach County.
- Conducts projects identified in approved management plans such as exotic removal on natural areas and muck removal in the C-51 Canal.
- Seeks grants for design and construction of public use facilities, natural areas restoration and implementation of management plans.
- Managing the Lake Worth Lagoon Partnership Grant Program to fund municipal storm water and septic retrofit projects.

Parks and Recreation

- Minimizes the use of raw materials to fabricate various park amenities (i.e., Single Rail fences versus Double Rail fences).
- Purchases items that have a longer life span and therefore reduce waste (i.e., fiberglass versus metal doors which hold up much better in South Florida climate).
- The Department of Environmental Resources Management and the Parks & Recreation Department worked together to complete a large restoration project at John Prince Park (Square Lake and Lake Osborne shorelines). After the work was completed aquatic plant/litter control floating barriers were installed to help control the amount of floating vegetation and debris from the L-14 canal to the restoration site. This improvement resulted in increased water quality and a more balanced ecosystem. An added benefit was recycled material was used to fabricate the barriers.

- Experimenting with a product called Terra-Sorb. It is a super-absorbent, potassium-based co-polymer gel that significantly increases the water-holding capacity of soil. It absorbs up to 200 times its weight in water and slowly releases it to nearby plant roots. Terra-Sorb will repeatedly absorb and release water for several years (Natural Resources section).

Palm Tran

- Public transportation reduces the nations carbon emissions by 37 million metric tons annually, just by running our system we are helping keep the air clean.

Solid Waste Authority

- Maintains an exotic vegetation management program.
- Converting closed landfills into parks and recreational facilities.

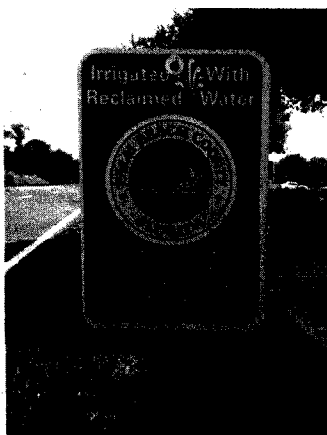
Water Utilities

- Tiered water conservation rates where those using more water pay a higher cost.
- Provide reclaimed water to customers in established Mandatory Reclaimed Water Service Areas.
- Internal motorpool fleet composed primarily of hybrid vehicles.
- Radio control water meters are being installed, reducing automobile fuel consumption.
- Providing reclaimed water to Florida Power and Light (FPL) for cooling at the FPL Western Energy Service Center.

Health Department

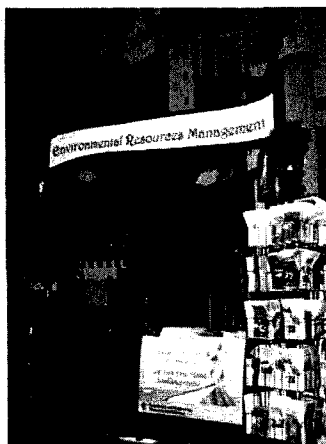
- Member of the Southeast Diesel Collaborative, an initiative to reduce diesel emissions.
- Worked with industry to install a test membrane filter (Permeator) equipment to capture gasoline being evaporated into the atmosphere from the storage tanks. The evaporating gas was captured and sent back into the storage tank for reuse. This test study was so successful for stage II vapor recovery gas stations that it is being implemented by other gas stations.
- Work with local municipalities to apply for grants supporting green initiatives.
- Moving into a new energy efficient building.
- Member of the Southeast Greenhouse Gas reduction task force.
- Member of the U.S. Green Building Coalition of the Southeast Greenhouse Gas reduction task force.

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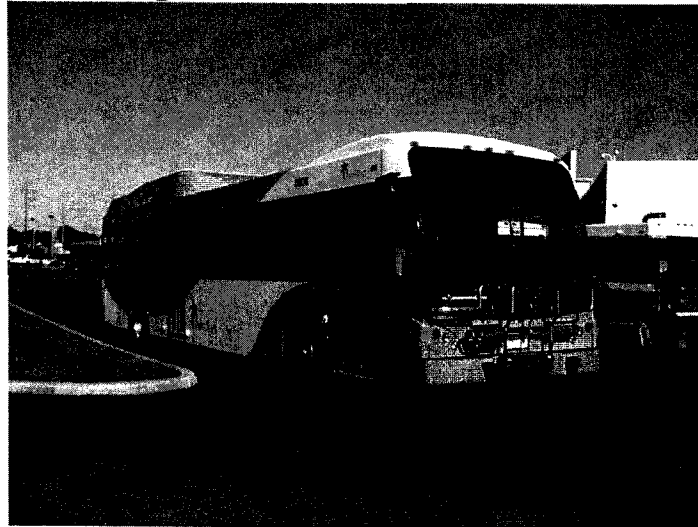


P4 POLLUTION PREVENTION Coalition Of Palm Beach County

Water Utilities: *“PURPLE PIPES = Reclaimed water”*
Government, industry & academia work together to Prevent Pollution



Environmental Resources Management: *“Preserving sensitive lands and protecting our natural resources”*



Palm Tran: *“Try riding a hybrid bus, bring a bike if you like!”*
Health Department: *Partnering with business to capture gasoline vapors.*

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Appendix A

Palm Beach County Florida Green Local Government

JULY 8, 2009 PRELIMINARY INVENTORY

A- County Administration

		Total Points	Achieved	Planned	Not planned	Not applicable
Credit 1: Local government environmental commitment		5				
a)	Write or re-write mission statement to include the local government's commitment to the environment	2				2
b)	Incorporate the mission statement into the local government's comprehensive plan	3	3			
Credit 2: Conservation planning		12				
a)	Monitor and track local government energy use	1				1
b)	Develop a local government energy reduction plan	1				1
c)	Monitor and track local government water use	1				1
d)	Develop a local government water reduction plan	1				1
e)	Monitor and track local government solid waste generation/recycling rates	1				1
f)	Develop a local government solid/hazardous waste reduction plan	1				1
g)	Develop and EPP program for the local government	1				1
h)	Encourage EPP program implementation	5				5
Credit 3: Reduce Green House Gas Emissions		4				
a)	Participate in Cities for Climate Protection Campaign	1				1
b)	Alternative Fuel vehicle purchase	3	3			
Credit 4: Build, renovate, and maintain green government buildings		17				
a)	Become a member of FGBC	1				1
b)	Become a member of USGBC	1				1
c)	Construct LEED or FGBC certified buildings or renovate for LEED EB or CI	10		10		
d)	Employee green cleaning and maintenance procedures	5	5			

Credit 5: Dedicate Personnel to green County process		3				
a)	Develop and maintain an office, person, or group to coordinate current and future green County activities	3				3
Credit 6: Green local government building ordinance		16				
a)	Adopt an FGBC or LEED standard as official minimum criteria for new local government buildings	10				10
b)	Adopt green cleaning/maintenance practices available from FL DEP	5				5
c)	Enact green landscaping ordinance for local government buildings	1				1
Credit 7: Community Education		1				
a)	Budget for public County/education related to the local government's commitment to the Florida Green Local Government Standard	1				1
Credit 8: Staff education		1				
a)	Organize green building education for local government staff	1				1
Total Credits		59	11	10	0	38

B. County Cooperative Extension

		Total Points	Achieved	Planned	Not planned	Not applicable
Credit 1: Florida friendly government owned landscapes		10				
a)	Certified Florida friendly landscapes within the County	10	10			
Credit 2: Community Incentives		6				
a)	Offer free or discounted green products to the public	6	6			
Credit 3: Promotion of organic farming		5				
a)	Offer incentives to maintain/create certified organic farms within the County or to incorporate sustainable and water efficient agriculture	5	5			
Credit 4: Community education		4				
a)	Offer green building or green local government education to the community	1	1			
b)	Provide green building or green local government educational materials	1	1			

c)	Maintain an active FY&N program or other builder/developer homeowner outreach program	1	1			
d)	Active teacher/student education program	1		1		
Credit 5: Industry education		2				
a)	Offer promotion and education of water conservation within the agriculture sector	1	1			
b)	Offer education on principles and applications of organic farming, permaculture and sustainable agriculture	1	1			
Total Credits		27	26	1	0	0

C. Facilities Development and Operations

		Total Points	Achieved	Planned	Not planned	Not applicable
Credit 1: Monitor and track green building within the County		10				
a)	Create and maintain an electronic database of all building energy code compliance	5				5
b)	Create and maintain an electronic database of all green and energy ratings conducted on all buildings and land developments within the County	5				5
Credit 2: County green building program with incentives		14				
a)	Adopt FGBC or LEED green standards as officially recognized green standards of the County	2				2
b)	Offer incentive(s) for FGBC or LEED certified commercial and institutional buildings	4				4
c)	Offer incentive(s) for FGBC or Energy Star certified green homes	4				4
d)	Offer incentive(s) for FGBC certified green developments	4				4
Credit 3: Preserve/enhance native habitat and natural resources		8				
a)	Require mitigation for consumption of natural habitat or resources	5				5
b)	Enact and enforce a tree preservation or land-clearing ordinance	1				1
c)	Regulate impervious parking surfaces	1				1
d)	Enact a septic system replacement ordinance	1				1
Credit 4: Conserve water resources		2				
a)	Enact a rain sensor ordinance applicable to all functioning automatic irrigation systems	1				1

b)	Enact a landscaping ordinance for new construction	1				1
Credit 5: Staff Education		1				
a)	Require all inspectors, reviewers, and supervisors to complete four hours of CEU approved course in green building on a bi-annual basis	1				1
Credit 6: Industry education		3				
a)	Department offers classes to industry professionals that detail any green incentives or regulations present	1				1
b)	Department advertises and offers incentives for local construction industry professionals to attend green building classes offered by others	1				1
c)	Conduct a green building awards program	1				1
Credit 7: Community education		1				
a)	Public County and case studies for green buildings	1				1
Total Credits		39	0	0	0	39

D - Economic Development and Tourist Development Council

	Total Points	Achieved	Planned	Not planned	Not applicable
Credit 1: Green building to spur economic development	2				
a)	Team with tourism department on eco-tourism campaign	1	1		
b)	Track amount of tourism that takes part in eco-related activities	1		1	
Credit 2: Green building through historic preservation/downtown revitalization	1				
a)	Achieve Florida Main Street Designation	1		1	
Credit 3: Local business incentives	2				
a)	Incentives for location of green businesses within the County	1	1		
b)	Offer special promotion for local eco-hotels	1	1		
Credit 4: Revitalize distressed areas	2				
a)	Incentives for green development	2	2		
Credit 5: Historic Preservation	2				
a)	Develop a historic preservation ordinance	1	1		
b)	Develop funding mechanism to aid with historic preservation	1	1		
Total Credits		9	7	2	0

E. Fire Rescue

	Total Points	Achieved	Planned	Not planned	Not applicable
Credit 1: Reduce greenhouse gas emissions	2				
a) Use of AFV and /or bicycle patrol for urban/neighborhood areas	1				1
b) Use renewable energy as backup/emergency power	1		1		
Credit 2: Reduce solid and hazardous waste	5				
a) Maintain green fleets	3				3
b) Firing ranges utilize non-lead bullets or trap and collect fragments	1				1
c) Minimize photo-processing waste	1	1			
Credit 3: Conserve water	1				
a) Fire departments review training operations and conserve water where appropriate	1	1			
Credit 4: Enhance durability of built environment	1				
a) Incentives for disaster mitigation	1				1
Credit 5: Community education	2				
a) Offer mitigation audits to homes, businesses, and local government buildings	1				1
b) Create an education campaign for mitigation (shelters point out features with signs, etc.)	1				1
Credit 6: Staff training	2				
a) Police trained in crime prevention through environmental design	1				1
b) Public safety staff attends training on healthy street design	1				1
	13	2	1	0	10

F - Energy Utility (Not applicable)

	Total Points	Achieved	Planned	Not planned	Not applicable
Credit 1: Reduce greenhouse gas emissions through renewable energy and energy efficiency	4				
a) Offer green power	1				
b) Certify renewable electric products under Center for Resource	1				

	Solutions					
c)	Voluntary funding of green power through customer billing	1				
d)	Become an Energy Star ally	1				
Credit 2: Reduce waste		3				
a)	Actively promote fly ash/blast furnace slag source	1				
b)	Utilize recycled billing envelopes	1				
c)	Enable customer service to make online bill payments	1				
Credit 3: Incentives to reduce energy use		5				
a)	Offer distributed generation incentives	1				
b)	Offer energy audits	1				
c)	Commercial building incentives	1				
d)	Residential building incentives	1				
e)	Rate structures based on consumption	1				
Credit 4: Community education		4				
a)	Informative billing	1				
b)	Take part in any speaker's bureau or sponsor workshops	1				
c)	Emissions info posted on website	1				
d)	Enable customers to track and analyze their usage via the internet	1				
Credit 5: Staff education		2				
a)	Send appropriate staff for training related to distributed generation	1				
b)	Send appropriate staff for energy audit training	1				
Total Credits		18	0	0	0	0

G - Housing and Community Development

	Total Points	Achieved	Planned	Not planned	Not applicable
Credit 1: Provide green, affordable housing to the community	20				
a) Construct/renovate green buildings	20				20
Credit 2: Increase the affordability of affordable housing	3				

a)	Affordable housing constructed by County and other parties mandated green	1				1
b)	Offer incentives for construction of green affordable housing	1				1
c)	Offer incentives for location efficient affordable housing	1	1			
Credit 3: Improve current stock of affordable housing		1				
a)	Remodeling of affordable housing mandated green	1				1
Credit 4: Community education		1				
a)	offer orientation classes for residents of affordable housing or refer to existing courses	1				1
Credit 5: Staff education		1				
a)	All applicable staff to complete equivalent of four hours of CEU approved course in green building on a bi-annual basis	1				1
Total Credits		26	1	0	0	25

H - Human Resources

		Total Points	Achieved	Planned	Not planned	Not applicable
Credit 1: Reduce greenhouse gas emissions		2				
a)	Alternative commuting incentives for local government employees	2		2		
Credit 2: Reduce solid and hazardous waste		1				
a)	Provide reusable mug/water bottle to all employees	1				1
Credit 3: Staff education		6				
a)	New employee orientation includes general local government commitment to environment	3				3
b)	Conduct or refer to special training on one or more green local government program	3				3
Total Credits		9	0	2	0	7

I - Information Systems Services

		Total Points	Achieved	Planned	Not planned	Not applicable
Credit 1: Reduce solid and hazardous waste		2				
a)	Operate local government computer and equipment reuse center	1	1			

b)	Recycling of end-of-life electronic equipment	1	1			
Credit 2: Conserve energy and resources through policy		2				
a)	Enact local government policy whereby all computer/ancillary equipment is turned off when not in use	1				1
b)	Enact policy whereby all computer/ancillary electronic equipment purchased has conservation features such as standby modes and double sided printing capability	1				1
Credit 3: Community education		2				
a)	Operate website dedicated to the green local government program	1				1
b)	Develop environmental education content for County websites, TV programs etc.	1	1			
Credit 4: Staff education		1				
a)	Conduct regular education on energy use/energy savings modes for in-house computers and ancillary equipment	1				1
Total Credits		7	3	0	0	4

J - Environmental Resources Management

		Total Points	Achieved	Planned	Not planned	Not applicable
Credit 1: Preserve/enhance habitat		5				
a)	Become a designated Waterfronts Florida Community	1				1
b)	Become an Audubon Sustainable Community	1				1
c)	Create an endangered lands conservation/purchasing program	1	1			
d)	Certify community under National Wildlife Federation Wildlife Habitat program	1				1
e)	Develop and implement a plan for invasive species removal throughout public lands in the County	1	1			
Credit 2: Engage and learn from other similar departments		1				
a)	Become a member of FLERA	1	1			
Credit 3: Minimize greenhouse gas emissions and preserve air quality		4				
a)	Offer local tax based or other AFV incentives	1				1
b)	Enact automobile emission regulations for vehicles registered in	1				1

	county					
c)	Require vapor controls at all gas stations	1	1			
d)	Enact open burning regulations	1				1
Credit 4: Preserve/enhance habitat		3				
a)	Coastal areas to enact sea turtle ordinance	1	1			
b)	Enact a manatee protection plan	1	1			
c)	Develop a boat facility siting plan	1				1
Credit 5: Conserve water		2				
a)	Enact car wash standards	1				1
b)	Enact fountain/water feature standards	1				1
Credit 6: Community education		4				
a)	Pertinent local GIS and other data on County website	1	1			
b)	Air quality index on website	1				1
c)	Results from water quality testing on website	1	1			
d)	Operate an environmental demonstration/learning center	1				1
Total Credits		19	8	0	0	11

K - Parks and Recreation

		Total Points	Achieved	Planned	Not planned	Not applicable
Credit 1: Green public amenities		14				
a)	Maintain organic community gardens	1		1		
b)	Minimize chlorine in community swimming pools	1	1			
c)	Install appropriate bicycle security at all public amenities	1	1			
d)	Public golf courses are Audubon certified	2	2			
e)	Apply green landscaping and irrigation standards, proper waterfront considerations, and integrated pest management to public amenities	1	1			
f)	Minimize heat island effect/storm water runoff of recreational areas through trees, highly reflective materials, or impervious surface	1	1			
g)	Public beaches adhere to Blue Wave Campaign criteria	5	5			

h)	Implement recycling stations for plastic, glass, and aluminum beverage containers at all recreational areas	1	1			
i)	Implement energy efficient lighting and controls for outdoor stadiums, courts, parks, and playfields	1	1			
Credit 2: Staff education		1				
a)	Each staff member trained in an area related to their function on a bi-annual basis	1	1			
Credit 3: Community education		1				
a)	Place informative signs and/or brochures at green features of public amenities that detail their benefits	1	1			
Total Credits		16	15	1	0	0

L - Planning, Zoning and Building

		Total Points	Achieved	Planned	Not planned	Not applicable
Credit 1: Monitor and track green building within the County		7				
a)	Develop a system of sustainable community indicators related to local government planning	1				1
b)	Link indicators to a GIS system	1				1
c)	Assist other departments with the tracking of indicators related to their function	5				5
Credit 2: Preserve/enhance pedestrian travel within the County to reduce green house gas		3				
a)	Maintain a bicycle/pedestrian coordinator on staff	1				1
b)	Implement FDOT "12 Steps Towards Walk able Communities" into planning process	1	1			
c)	Healthy street design is official local government policy	1	1			
Credit 3: Green building incorporated into County planning process		3				
a)	Develop urban area boundaries	1	1			
b)	Encourage mixed-use zoning / development	1	1			
c)	Maintain or reduce net impervious area through zoning decisions	1		1		
Credit 4: Staff education		1				

a)	Organize green building seminars and/or training sessions for staff and elected officials to attend on a bi-annual basis, or send staff to external courses	1		1		
Total Credits		14	4	2	0	8

M - Ports and Marinas - (Not at this time)

		Total Points	Achieved	Planned	Not planned	Not applicable
Credit 1: Preserve aquatic habitat		2				
a)	Take part in Florida Clean Marina program	1				
b)	Implement advanced stormwater controls and waterfront considerations	1				
Credit 2: Preserve aquatic habitat		1				
a)	Offer low pollution engine incentives	1				
Credit 3: Boater education		1				
a)	Host boater education classes	1				
Total Credits		4	0	0	0	0

N - Property Appraiser/Tax Collector (Not at this time)

		Total Points	Achieved	Planned	Not planned	Not applicable
Credit 1: Monitor and track green buildings		2				
a)	Include green features/ratings of home in database	2				
Credit 2: Incentives for green buildings		4				
a)	Tax incentives for certified green properties	2				
b)	Tax incentives for lands qualifying as historic, high water recharge, greenbelt, etc.	2				
Credit 3: Industry education		1				
a)	Green education to local lending/real estate industry	1				
Total Credits		7	0	0	0	0

O. Public Transportation - Palm Tran & Metropolitan Planning Organization

	Total Points	Achieved	Planned	Not planned	Not applicable
Credit 1: Reduce green house gas emissions	5				
a) Utilize alternative fuels for fleet	2	2			
b) Institute a bicycle commuter assistance program	1	1			
c) Make amends for vehicles to accommodate bicycles	1	1			
d) Engage in carpool/vanpool assistance	1	1			
Credit 2: Monitor and track green building progress	1				
a) Analyze public transportation route system to determine connectivity to bicycle and pedestrian network	1	1			
Credit 3: Reduce solid and hazardous waste	1				
a) Operate a green fleet	1	1			
Credit 4: Community education	2				
a) Provide public transportation route searching via the internet	1	1			
b) Provide information about alternative commuting on website	1	1			
Total Credits	9	9	0	0	0

P - Engineering and Public Works

	Total Points	Achieved	Planned	Not planned	Not applicable
Credit 1: Minimize solid and hazardous waste through recycling and reuse	10				
a) Develop a construction project waste management/recycling plan	3	3			
b) Operate a local government material/chemical reuse/redistribution center	1				1
c) Operate a community tool lending library	1				1
d) Maintain a green fleet program for department or entire local government	4				4
e) Utilize integrated pest management	1				1
Credit 2: Minimize greenhouse gas emissions	2				
a) Operate local government alternative fueling station	1				1

b)	Earn waste reduction credit through the production of clean-burning fuels	1				1
Credit 3: Minimize local government energy use		3				
a)	Use LED traffic lights	1	1			
b)	Utilize solar or other energy efficient streetlights	1	1			
c)	Operate a Rebuild America program for the local government	1				1
Credit 4: Enhance stormwater control and water conservation		3				
a)	Street sweeping	1	1			
b)	Routine maintenance plan for maintenance of storm sewers	1	1			
c)	Employ green landscaping procedures for local government facilities	1				1
Credit 5: Preserve/enhance street tree coverage		1				
a)	Become a tree County USA	1				1
Credit 6: Reward innovation		1				
a)	Develop a reward/incentive program for employee environmental innovation in public works	1				1
Credit 7: Staff education		2				
a)	Offer green fleet management training to all applicable departments	1				1
a)	Train and certify select staff as certified arborists	1				1
Credit 8: Community education		1				
a)	Community stormwater education campaign	1				1
Total Credits		23	7	0	0	16

Q - School Board (Not applicable)

	Total Points	Achieved	Planned	Not planned	Not applicable
Credit 1: Reduce greenhouse gas	2				
a) Utilize alternative fuel for school buses	2				
Credit 2: Preserve/enhance habitat	5				
a) School grounds certified by environmental program	5				
Credit 3: Reduce solid waste	3				

a)	School system utilizes a pollution prevention/EPP program	1				
b)	School equipment reuse program/swap shop	1				
c)	Operate and maintain a green fleet program	1				
Credit 4: Construct and maintain green buildings		11				
a)	Green operation and maintenance of buildings	1				
b)	Construct/renovate green schools	10				
Credit 5: Green building becomes official policy		4				
a)	Mandates for green buildings/green cleaning and maintenance	4				
Credit 6: Student education		4				
a)	Involve students in green projects within the school	2				
b)	Involve students in green projects outside the school	2				
Credit 7: Staff education		2				
a)	Incentives for environmental training of teachers over the summer	2				
Total Credits		31	0	0	0	0

R - Solid Waste Authority

		Total Points	Achieved	Planned	Not planned	Not applicable
Credit 1: Reduce local government solid waste		7				
a)	Become a partner in the EPA waste wise program	1				1
b)	County wide chemical/hazardous waste collection	1	1			
c)	Operate public reuse store/swap shop	1	1			
d)	C&D separation for recycling at landfill (wood pallets, metals, cardboard, carpet padding, bic , cement, etc.)	1	1			
e)	Offer recycled paint back to community	1	1			
f)	Landfill gas recovery	1	1			
g)	Develop a disaster waste management plan	1	1			
Credit 2: Monitor and track green building		2				
a)	Curbside recycling for homes and businesses	1	1			
b)	Monitor types and amounts of material entering landfill	1	1			

Credit 3: Preserve/Enhance habitat		1				
a)	Closed landfill management	1	1			
Credit 4: Local business incentives/regulations		2				
a)	Incentives for local businesses who utilize EPP or other solid waste reduction strategy	1	1			
b)	Mandatory recycling of typical recyclables and C&D debris for homes and businesses.	1				1
Credit 5: Minimize solid waste generation		2				
a)	Volume based on special rates for solid waste collection	1				1
b)	Offer mulched yard waste to community	1	1			
Credit 6: Community education		2				
a)	Teach EPP/recycling to local businesses	1	1			
b)	Develop education program for solid waste management	1	1			
Credit 7: Staff education		1				
a)	Conduct a customer waste survey	1	1			
Total Credits		17	14	0	0	3

S - Water Utilities

	Total Points	Achieved	Planned	Not planned	Not applicable
Credit 1: Plant operations aimed at environmental performance		4			
a)	Seek FLDEP plant operations excellence award	2	2		
b)	Create a reclaimed water infrastructure	2	2		
Credit 2: Reduce energy use		2			
a)	Conduct energy audit of treatment facilities	1	1		
b)	Use cogeneration	1	1		
Credit 3: Reduce solid and hazardous waste		1			
a)	Use recycled bill envelopes	1	1		
Credit 4: Reduce water use		4			
a)	utilize rate structures based on consumption	1	1		
b)	Low flow fixture rebates	1		1	

c)	Enforce watering restrictions during meter reads	1	1			
d)	Require metering of shallow aquifer removal and sub-metering of multi-family housing	1	1			
Credit 5: Community education		7				
a)	Utilize informative billing	1	1			
b)	Distribute printed material or create internet content detailing water wastewater source, quality, treatment process	1	1			
c)	Create an education campaign for water use reduction (xeriscape, rainwater, etc.)	1		1		
d)	Maintain an on-call water quality program	1	1			
e)	Become part of groundwater guardian program	1	1			
f)	Offer home and business audits	1				1
g)	Enable customers to track and analyze their usage via the internet	1	1			
Total Credits		18	15	2	0	1

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**Palm Beach County
Green Task Force on
Environmental Sustainability and
Conservation**

Presentation to the
Palm Beach County Board of County Commissioners

September 22, 2009

Green Task Force Re-Cap

- ❖ Established June 2008
- ❖ Sunset July 2009
- ❖ 17 voting members (e.g. architects, contractors, developers, environmental organizations, attorneys etc.)
- ❖ 3 County Dept. Representatives
- ❖ Monthly meetings

Sub-Committees

- ❖ Government
- ❖ Energy
- ❖ Green Building
- ❖ Environment
- ❖ Education

Sub-Committees

- ❖ Met twice per month
- ❖ Develop top 3 recommendations

The Final Report

- ❖ Executive Summary
- ❖ Context
 - ❖ Taskforce Overview
 - ❖ Economic, Environmental, and Political Context
 - ❖ Existing County Green Initiatives
- ❖ Recommendations by Sub-Committee

Government

1. Establish Sustainability Administrative Infrastructure.
 - a. Sustainability Coordinator
 - b. Staff “Green Team”
 - c. Green Advisory Board
2. Establish Financial Tracking Procedures.
3. Establish Comprehensive Energy / Green House Gas Inventory and Reduction Strategy.

Energy

1. Advocate for Solar Rebate Program
2. Establish Horse Manure Digestion to Energy Facility

Green Building

- 1. Mandate Construction Waste Recycling.**
- 2. Establish Green Building Incentives.**
- 3. Create Exemption from Architectural Guidelines.**

Environment

1. Long-term Support of and Funding for Existing Land Conservation Programs.
2. Develop Policies to Preserve Agricultural Zoning and Encourage Urban Gardening.
3. Develop and Implement Incentive Programs for Xeriscaping and Permaculture.

Education

1. Support Annual Green, Energy, and Climate Conference Expo.
2. Develop Permanent Green Content for County Website.
3. Establish Green Collar Economic / Job Development.

Conclusions:

Need for Strategic Planning

- ❖ County is doing a lot. Great Inventory of Green Initiatives came out of efforts.....
- ❖But, need to develop comprehensive green planning strategy to coordinate and maximize effectiveness.

Conclusions: Lack of Implementation

- ❖ Many reports with same recommendations and conclusions..not much implementation.
 - ❖ Alternative Energy Task Force
 - ❖ Palm Beach County Strategic Economic Development Plan to BCC
 - ❖ Water Task Force
 - ❖ Land Development Regulation Advisory Board
 - ❖ Palm Beach County Schools

Conclusions: Green the *Process*

- ❖ Integrate green into every decision.
- ❖ Focus less on green actions to undertake, but greening every action undertaken....

Acknowledgements

- ❖ The BCC for creating the Task Force.
- ❖ All of the Members and Sub-Committee Members
- ❖ Department Representatives
- ❖ Members of the Public Attending
- ❖ All Staff

Palm Beach County Green Task Force on Environmental Sustainability and Conservation

FINAL REPORT-STAFF RECOMMENDATIONS

Palm Beach County

Green Task Force on Environmental Sustainability and Conservation

❖ **Task Force Recommendation:**

Establish and Incorporate a Sustainability Administrative Structure into County Administrative Operations including a Sustainability Coordinator position, an internal Green Team, and a permanent Green Advisory Board.

❖ **County Staff Recommendation:**

- 1.) Establish a County Green Team consisting of designated Sustainability Coordinators from the larger County operational Departments;
- 2.) Establish a Sustainability Coordinator position within ERM to oversee County efforts; and
- 3.) Reject recommendation for a permanent Green Advisory Board.

❖ **Estimated Annual Cost:**

\$100,000/\$80,000

- ❖ **Task Force Recommendation:** Create a Centralized Financial Tracking System to Quantify and Qualify the Savings Attributed to County Sustainability Efforts.
- ❖ **County Staff Recommendation:** Develop tracking system and implement in single department on a trial basis. Review, evaluate and rollout to all County Departments upon determination of effectiveness.
- ❖ **Estimated Annual Cost:** \$3,000 plus undetermined staff time.

- ❖ **Task Force Recommendation:** Establish Comprehensive Countywide Energy Conservation and Green House Gas Emission Strategy to Reduce Energy Consumption and Green House Gas Emissions.

- ❖ **County Staff Recommendation:**
 - ❖ 1.) Obtain Florida Green Local Government certification through the Florida Green Building Coalition and join International Council of Local Environmental Initiatives (ICLEI).

❖ **County Staff Recommendation:**

- ❖ 2.) Establish baseline emissions from which quantifiable reduction targets can be achieved.
- ❖ 3.) Develop and promote compliance strategy based on provisions of Governor's Climate Action Plan, HB 7135, and HB 697.

❖ **Estimated Annual Cost:** \$25K-\$50K for certification, software and initial planning effort. Undetermined cost for baseline emissions survey and implementation of compliance strategies.

- ❖ **Task Force Recommendation:** Advocate for a Rebate Program for Solar Hot Water Heaters.
- ❖ **County Staff Recommendation:** 1.) Prepare and deliver BCC request for consideration to FPL based upon Task Force recommendation. 2.) Create consolidated public information source for local, state or national rebate programs.
- ❖ **Estimated Annual Cost:** \$65K

- ❖ **Task Force Recommendation:** Establish a Horse Manure Anaerobic Digestion Facility in the County.
- ❖ **County Staff Recommendation:** Initiate study to include cost, financing, ability to control flow (mandatory participation).
- ❖ **Estimated Annual Cost:** \$11M Capital Cost estimated by Task Force and eventual self-financing from tipping fees and other revenue including energy sales. No staff estimates.

- ❖ **Task Force Recommendation:** Mandate Recycling of Construction Waste.
- ❖ **County Staff Recommendation:** Consider favorably with additional analysis required. Include provisions allowing incineration as acceptable reclamation method.
- ❖ **Estimated Annual Cost:** Not determined. Task Force believes program will generate revenue from licensing and penalty fees and provide a cost savings through reduced impact on landfill.

- ❖ **Task Force Recommendation:** Create a Green Building Incentive Program for Private Developers.

- ❖ **County Staff Recommendation:** Review incomplete.

- ❖ **Estimated Annual Cost:** Not determined.

- ❖ **Task Force Recommendation:** Create an Exemption from Architectural Guidelines for Green Buildings.
- ❖ **County Staff Recommendation:** Review incomplete.
- ❖ **Estimated Annual Cost:** Not determined.

❖ **Task Force Recommendation:** Commit to Long-term Support of and Funding for the Existing Conservation Lands Maintenance Program.

❖ **County Staff Recommendation:**

- ❖ 1.) Continuation of use of Ag Reserve lease revenues for conservation lands management.
- ❖ 2.) Reinstatement of full market value for TDRs with revenue dedicated to conservation lands management or purchase.
- ❖ 3.) Pursue half-cent sales tax for 2 years to create endowment fund for conservation lands management.

❖ **Estimated Annual Cost:** \$5M - \$5.5M.

- ❖ **Task Force Recommendation:** Develop Policies to Preserve Agricultural Zoning and Encourage Urban Gardening.
- ❖ **County Staff Recommendation:** Existing ULDC standards satisfy this recommendation. Nothing additional recommended.
- ❖ **Estimated Annual Cost:** No additional cost.

- ❖ **Task Force Recommendation:** Develop and Encourage Incentive Programs for Xeriscaping and Permaculture.

- ❖ **County Staff Recommendation:** Existing ULDC standards encourage xeriscaping, water conservation and environmental sustainability. Nothing additional recommended.

- ❖ **Estimated Annual Cost:** No additional cost.

- ❖ **Task Force Recommendation:** Fund and Help Organize the Annual Green, Energy, and Climate Conference / Expo.
- ❖ **County Staff Recommendation:** Provide staff support in planning and organizing this conference and climate change regional summit if requested by sponsors. Provide minimal sponsorships if budget allows.
- ❖ **Estimated Annual Cost:** \$2.5K - \$5K plus staff time.

- ❖ **Task Force Recommendation:** Develop and Maintain a Permanent Green Column on the Palm Beach County Government Website.
- ❖ **County Staff Recommendation:** Site is developed and operational. Continue to maintain and enhance.
- ❖ **Estimated Annual Cost:** Not determined. Handled by existing Public Affairs staff.

- ❖ **Task Force Recommendation:** Establish Green Collar Economic Enterprises / Cultural Training Centers throughout Palm Beach County.
- ❖ **County Staff Recommendation:** The BCC has given direction to EDO to implement the federal energy and retrofit programs and to coordinate with the BDB for development of the energy cluster industry group. No additional recommendations at this time.
- ❖ **Estimated Annual Cost:** Currently funded with 3-year federal grant.