



# FGBC

Florida Green Building Coalition



Green Local Governments

Setting the standards for Green Building  
in the State of Florida

*Reference Guide*  
Version 3.0

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## A - ADMINISTRATION

### *Lead by Example*

#### Credit 1: Local government environmental commitment

##### *ACTIVITY:*

- a) Write or re-write mission statement to include the local government's commitment to the environment. (2 points)
- b) Incorporate the mission statement into the local government's comprehensive plan. (3 points)

##### *APPROACH:*

The mission statement should highlight efforts to enhance or preserve sustainability within the city/county. Mission statements can be further strengthened with an ordinance or resolution, and including them in a comprehensive plan demonstrates accountability.

##### *SUGGESTED DOCUMENTATION:*

Copy of mission statement and/or comprehensive plan language.

##### *BENEFIT:*

A mission statement that includes a focus on the environment may unify support and justify many appropriate environmental actions.

##### *RESOURCES:*

City of Portland, OR Sustainable City Principles

<http://www.portlandonline.com/osd/index.cfm?c=41454>

Sarasota County, FL Sustainability Resolution

[http://rsc.co.sarasota.fl.us/documents/stewardship\\_resolution.pdf](http://rsc.co.sarasota.fl.us/documents/stewardship_resolution.pdf)

#### Credit 2: Conservation planning.

##### *ACTIVITY:*

- a) Monitor and track local government energy use. (1 point)
- b) Develop a local government energy reduction plan. (1 point)
- c) Monitor and track local government water use. (1 point)
- d) Develop a local government water reduction plan. (1 point)
- e) Monitor and track local government solid waste generation/recycling rates. (1 point)
- f) Develop a local government solid/hazardous waste reduction plan. (1 point)
- g) Develop an EPP program for the local government. (1 point)
- h) Encourage EPP program implementation (1 point per department, max 5 points)

##### *APPROACH:*

Monitor and track local government energy use in buildings through bill collection and analysis as an indicator for performance / future progress. Utilize information to develop and institute a plan to reduce energy use by at least 10% within 5 years. Undertake a similar study for water consumption and solid

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waste generation. Using existing examples and resources develop and implement an environmentally preferable purchasing program (EPP) for the local government, as part of, or separate from the solid/hazardous waste reduction plan. This program should

document how purchasing decisions consider the US EPA's 5 guiding principles to EPP. Receive 1 point for every department that implements the EPP program into their actual purchasing scheme.

## *SUGGESTED DOCUMENTATION:*

Provide summary of energy use and/or water use and/or solid waste generation within local government for a period of at least 2 years. Submit copies of conservation plans/programs.

## *BENEFIT:*

Monitoring current consumption sets a baseline upon which to improve. Undertaking monitoring activity and analyzing results often unveils opportunity for conservation. Local governments often spend a significant amount of their annual budget on energy, water, and waste. Successful plan/program implementation often yields economic as well as environmental benefits.

## *RESOURCES:*

Portland, OR Energy Division Publications

<http://www.portlandonline.com/osd/index.cfm?c=41462>

US EPA EnergyStar for Government

[http://www.energystar.gov/index.cfm?c=government.bus\\_government](http://www.energystar.gov/index.cfm?c=government.bus_government)

Florida Water Management Districts

<http://www.dep.state.fl.us/secretary/watman/default.htm>

Florida DEP Waste Reduction Division

<http://www.dep.state.fl.us/waste/categories/wr/default.htm>

US EPA Environmentally Preferable Purchasing

<http://www.epa.gov/oppt/epp/index.htm>

US EPA Guiding Principles to EPP

<http://www.epa.gov/oppt/epp/pubs/guidance/finalguidance.htm>

## **Credit 3: Reduce greenhouse gas emissions.**

### *ACTIVITY:*

- a) Participate in Campaign. (1 point)
- b) Alternative Fuel Vehicle purchase. (1-3 points)

### *APPROACH:*

Participate in the International Council for Local Environmental Initiatives Cities for Climate Protection Campaign (CCP), and utilize the framework to develop a strategic agenda to reduce local air emissions. For 1 point, purchase at least 1 alternative fuel vehicle (AFV) for local government use and evaluate performance such that similar vehicles can be purchased in the future. For 2 points, utilize AFV for 25% of all local government owned passenger vehicles. For 3 points, utilize AFV for >50% local government owned passenger vehicles.

## *SUGGESTED DOCUMENTATION:*

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- a) Copy of required resolution for Cities for Climate Protection participation.
- b) Photo and basic AFV specs.

## *BENEFIT:*

Embarking on strategies to plan and implement greenhouse gas emission reductions show the local government's commitment to the global, as well as local environment. Reducing greenhouse gas emissions help combat global warming, and also improve local air quality, especially in urbanized areas.

## *RESOURCES:*

International Council for Local Environmental Initiatives

<http://www.iclei.org/us/ccp/>

City of Gainesville Climate Protection Campaign

<http://www.gru.com/OurEnvironment/AirQuality/ccpCampaign.jsp>

US DOE Clean Cities Program

<http://www.eere.energy.gov/cleancities/>

Clean Cities Coalition

<http://www.clean-cities.org/>

Florida Space Coast Clean Cities Coalition

<http://www1.eere.energy.gov/cleancities/>

Florida Green Local Government Standard Fleet Management and Vehicle Maintenance Module

## **Credit 4: Build, renovate, and maintain green government buildings.**

## *ACTIVITY:*

- a) Become a member of FGBC. (1 point)
- b) Become a member of USGBC. (1 point)
- c) Construct LEED or FGBC certified buildings or renovate for LEED EB or CI. (1 point per 10% of owned or leased facilities)
- d) Employ green cleaning and maintenance procedures. (1 point per 20% of owned or leased facilities)

## *APPROACH:*

Join the Florida Green Building Coalition (FGBC) and/or US Green Building Council (USGBC) under the Local Government membership category. Construct new buildings and facilities to the FGBC or USGBC LEED guidelines, and seek official certification. For existing buildings that undergo renovation, utilize the LEED Existing Buildings (EB) or Commercial Interiors (CI) specifications. Incorporate green cleaning and maintenance suggestions outlined in the Creating a Green and Profitable Work Environment Publication available from Florida Department of Environmental Protection Pollution Prevention Program. Indoor air quality can be adversely affected by using materials that off-gas, such as paint or carpeting. There are many products currently available with no or low VOCs, that are competitively priced.

## *SUGGESTED DOCUMENTATION:*

- a-b) Copy of membership application.
- c) Copy of relevant registration certificates.
- d) Copy of "baseline checklist" from referenced publication that indicates suggestions implemented.

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## *BENEFIT:*

Green construction, maintenance, and operation practices ensure that buildings not only conserve natural resources, but that they are also affordable to operate and healthy places to work.

## *RESOURCES:*

Florida Green Building Coalition

<http://www.floridagreenbuilding.org>

US Green Building Council

<http://www.usgbc.org>

Florida DEP Pollution Prevention Division – Green Building

<http://www.dep.state.fl.us/pollutionprevention/>

US Environmental Protection Agency ~ Indoor Air Quality

<http://www.epa.gov/iaq/voc.html>

Creating Green and Profitable Work Environments

<http://www.fsec.ucf.edu/en/consumer/buildings/commercial/cleaning.htm>

## **Credit 5: Dedicate personnel to green city/county process.**

## *ACTIVITY:*

- a) Develop and maintain an office, person, or group to coordinate current and future green city/county activities. (3 points)
- b) Implement an ISO 14001 Environmental Management System (1 point per department - maximum 5 points)

## *APPROACH:*

Create a designated office of sustainability, sustainability coordinator, or sustainable task force that consists of representatives from multiple departments to aid in fulfilling environmental mission of the local government. Responsibilities can be further strengthened with an ordinance or resolution. Implement an Environmental Management System to standardize activities for your organization.

## *SUGGESTED DOCUMENTATION:*

Written documentation of new responsibilities for existing staff, or description of new positions created. Provide third party audit results of the ISO 14001 Environmental Management System.

## *BENEFIT:*

Assigning staff to the green local government process will ensure an efficient and coordinated approach within government operations, and within the community at large. An office or staff dedicated to sustainability issues may uncover various current and future opportunities, such as dollar savings, through pollution prevention and other analysis. Environmental Management Systems provide ongoing assessments and goals for continuous improvement.

## *RESOURCES:*

Sustainable Sarasota

<http://www.scgov.net/sustainability/>

Sustainable Alachua County

<http://sustainac.org/>

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Orange County Convention Center

<http://www.occc.net/Community/green.asp>

ISO Environmental Management

[http://www.iso.org/iso/iso\\_14000\\_essentials](http://www.iso.org/iso/iso_14000_essentials)

## ***Control***

### **Credit 6: Green local Government Buildings Ordinance.**

#### ***ACTIVITY:***

- a) Adopt an FGBC or LEED standard as official minimum criteria for new local government buildings (5 points)
- b) Adopt green cleaning/maintenance practices available from FL DEP (5 points)
- c) Enact green landscaping ordinance for local government buildings. (1 point)
- d) Utilize Renewable Energy on Energy Efficient Buildings (1 point per building, maximum 5 points)

#### ***APPROACH:***

Enact a policy whereby all new government buildings / renovations meet the requirements of Silver Certification for the Florida Green Building Coalition (FGBC) or US Green Building Council's LEED Standards. Earn 1 point for Silver, 3 points for Gold, or 5 for Platinum) Alternatively, a local government may choose to only regulate the cleaning/maintenance practices, or installed landscape and irrigation practices for new/existing buildings. For existing buildings, the policy must include removal of all invasive species on the building grounds. Utilize renewable energy for government buildings, such as solar water heaters and solar photovoltaic systems on buildings that have implemented energy efficiency measures. Document energy efficiency with EnergyStar certification, an energy audit, or other method prior to installation.

#### ***SUGGESTED DOCUMENTATION:***

Copies of appropriate policies.

#### ***BENEFIT:***

Green construction, maintenance, and operation practices ensure that buildings not only conserve natural resources, but that they are also affordable to operate and healthy places to work.

#### ***RESOURCES:***

Florida Green Building Coalition

<http://www.floridagreenbuilding.org>

US Green Building Council

<http://www.usgbc.org>

Portland, OR LEED

[http://www.sustainableportland.org/portland\\_leed.pdf](http://www.sustainableportland.org/portland_leed.pdf)

Florida DEP Pollution Prevention Division – Green Building

<http://www.dep.state.fl.us/pollutionprevention/>

Sarasota County Landscaping Ordinance

<http://sarasota.extension.ufl.edu/Hort/WEL/ord/docs/ord.htm>

Florida Green Local Government Standard Environmental Landscaping Module and Video



## ***Education***

### **Credit 7: Community Education.**

#### ***ACTIVITY:***

- a) Budget for publicity / education related to the local government's commitment to the Florida Green Local Government Standard. (1 point)

#### ***APPROACH:***

If credit 5a has been incorporated, the entity must be given the means to undertake promotion of local government mission within the community. If a dedicated entity is not created, additional funds may be given to an extension service or other similar organization with which to accomplish this task.

#### ***SUGGESTED DOCUMENTATION:***

Submit dollar amount of funds earmarked for this task.

#### ***BENEFIT:***

Educating the community about the Green Local Government process may promote the local government's commitment to program aspects, and potentially foster community participation.

### **Credit 8: Staff Education.**

#### ***ACTIVITY:***

- a) Organize green building education for local government staff. (1 point).

#### ***APPROACH:***

If credit 5a has been incorporated, part of the entity's responsibility should be to organize various green building education opportunities for local government staff, including themselves. If a dedicated entity is not created, another department can be delegated this task.

#### ***SUGGESTED DOCUMENTATION:***

List of appropriate educational courses that can be held onsite, or that are offered offsite.

#### ***BENEFIT:***

Staff training is important to stay abreast of current trends and techniques, and to gain new insights.

#### ***RESOURCES:***

Sustainable Sarasota

<http://www.scgov.net/sustainability/>



## **B - AGRICULTURE AND EXTENSION SERVICE**

### *Lead by Example*

#### **Credit 1: Florida friendly government owned landscapes**

*ACTIVITY:*

- a) Certified Florida friendly landscapes within the city/county.

*APPROACH:*

Work with public works department to modify (if necessary) and certify public landscapes under Florida Yards & Neighborhoods program. (1 point of each 10% of city/county maintained acreage certified).

*SUGGESTED DOCUMENTATION:*

Copy of FY&N checklist for each certified property.

*BENEFIT:*

Florida friendly landscapes conserve water, have low maintenance requirements, and are naturally pest resistant.

*RESOURCES:*

Florida Yards & Neighborhoods Program

<http://fyn.ifas.ufl.edu/>

### ***Control***

#### **Credit 2: Community incentives.**

*ACTIVITY:*

- a) Offer free or discounted green products to the public. (2 points per product type offered for free, 1 point for each discounted product – maximum six points.)

*APPROACH:*

Offer free or discounted products such as compost bins, native drought tolerant seedlings, environmentally friendly pesticides, rain barrels, etc.

*SUGGESTED DOCUMENTATION:*

Submit type of product supplied, and estimated number of each to be distributed.

*BENEFIT:*

Simple, inexpensive products supplied at no or low cost to the community may help with community education, and may spawn further green activity within the community.

*RESOURCES:*

Charlotte County discounted compost bins

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<http://www.charlottecountyfl.com/EnvironmentalServices/solidwaste/backyardcomposting.asp>

Jacksonville Communi-Tree program

<http://www.jea.com/community/communitree.asp>

Miami-Dade County Adopt-A-Tree program

<http://www.miamidade.gov/derm/adoptatree.asp>

## **Credit 3: Promotion of organic farming.**

### *ACTIVITY:*

- a) Offer incentives to maintain/create certified organic farms within the city/county or to incorporate sustainable and water efficient agriculture. (1 point per incentive – maximum 5 points)

### *APPROACH:*

Example incentives include lower tax base for certified organic farms, assistance with organic certification fees, providing low interest loans for retrofit, and assistance with promotion and marketing.

### *SUGGESTED DOCUMENTATION:*

Provide details of incentives offered, and approximate value to average certified organic farm. Include number of certified farms operating or planned within the city/county.

### *BENEFIT:*

Organic produce does not rely on chemical pesticides, which often results in lower product yield. Incentives can help organic farms compete in marketplace. Demand for organic produce is growing in many areas, much of which is shipped in from outside Florida. Local organic farms can build local economy.

## ***Education***

## **Credit 4: Community education**

### *ACTIVITY:*

- a) Offer green building or green local government education to the community. (1 point)
- b) Provide green building or green local government education materials. (1 point)
- c) Maintain an active FY&N program or other builder/developer/homeowner outreach program. (1 point)
- d) Active an teacher / student education program. (1 point)

### *APPROACH:*

Conduct green building training to the public on topics such as integrated pest management, composting, sustainable agriculture, etc. through courses or seminars. In lieu of courses, provide material such as websites, local television programs, videos, printed material, etc. on green building topics. Maintain an active Florida Yards & Neighborhoods (FY&N) program or other outreach program such as master gardener, master conservationalist, etc. Develop and/or take part in a student/teacher education program on green building issues related to services provided by the agriculture department / extension service.

### *SUGGESTED DOCUMENTATION:*

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- a) Provide agenda for course(s).
- b) Supply examples of educational material.
- c) List name of program and key staff members.
- d) Describe nature of teacher/student program, and number of teachers participating or expected to participate.

## *BENEFIT:*

Educating the community on green building issues helps to filter local government commitment to public sector.

## *RESOURCES:*

Sustainable Sarasota

<http://www.scgov.net/sustainability/>

Florida Green Local Government Standard Environmental Landscaping Module, Posters and Video

## **Credit 5: Industry education**

### *ACTIVITY:*

- a) Offer promotion and education of water conservation within the agriculture sector. (1 point)
- b) Offer education on principles and applications of organic farming, permaculture and sustainable agriculture. (1 point)

### *APPROACH:*

Develop, distribute, and market educational material on green agricultural issues. Examples include courses, seminars, websites, printed material, etc. Mobil irrigation labs are another example that combines education with a technical assistance incentive.

### *SUGGESTED DOCUMENTATION:*

Submit details of the educational outreach such as course agendas, advertisements, or copies of printed material.

### *BENEFIT:*

Industry education and technical assistance may foster incorporation of green principles and help achieve local government goals.

### *RESOURCES:*

Sarasota County Extension Integrated Agricultural Management

<http://sarasota.extension.ufl.edu/AG/ag.shtml>

## **C - BUILDING AND DEVELOPMENT**

### *Lead by Example*

#### **Credit 1: Monitor and track green building within the city/county.**

##### *ACTIVITY:*

- a) Create and maintain an electronic database of all building energy code compliance. (5 points)
- b) Create and maintain an electronic database of all green and energy ratings conducted on all buildings and land developments within the city/county. (5 points)

##### *APPROACH:*

Require an electronic submission of energy code calculations or manually enter into a database. Obtain a hardcopy of rating certificate(s) and indicate program qualified for in database.

##### *SUGGESTED DOCUMENTATION:*

Describe strategy and process for tracking code compliance and ratings electronically.

##### *BENEFIT:*

Market penetration of ratings, as well as features that qualify a building for a rating, are useful indicators, as are details of methods used to achieve Florida Energy Code compliance. Data may be useful to determine effectiveness of any incentives, promotion, or incentives taking place towards the creation of green buildings.

##### *RESOURCES:*

Florida Green Building Coalition (FGBC)

<http://www.floridagreenbuilding.org/> Select Find Green: Projects

Florida Home Energy Ratings

[http://dbase.fsec.ucf.edu/pls/engauge/rating\\_search](http://dbase.fsec.ucf.edu/pls/engauge/rating_search)

### *Control*

#### **Credit 2: City/County green building program with incentives.**

##### *ACTIVITY:*

- a) Adopt FGBC or LEED green standards as officially recognized green standards of the city/county. (2 pts)
- b) Offer an incentive(s) for FGBC or LEED certified commercial and institutional buildings. (4 pts)
- c) Offer an incentive(s) for FGBC or Energy Star certified green homes. (4 points)
- d) Offer an incentive(s) for FGBC certified green developments. (4 points)

##### *APPROACH:*

Incorporate by resolution, ordinance, or otherwise a green building standard(s) to promote resource conservation and as a proactive step to reduce future capital expenditures for resource extraction. As a next step, offer incentives to foster participation. Example incentives include reduced permit, inspection

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or impact fees; fast track permitting; or promotion/publicity. Incentives may be for builder/developer, or building owner, but must have a value of at least \$300 per home, \$1000 per commercial building and \$2500 per land development.

## *SUGGESTED DOCUMENTATION:*

Provide copy of resolution, ordinance, or other documentation that indicates how standard has been made part of official city/county green building program. If the program contains an incentive, provide details and conditions of incentive, along with approximate dollar value per applicant.

## *BENEFIT:*

Adopting a green building standard as an official program for the city/county shows the community that the building department endorses the standard. Encouraging participation reaps benefits for the community at large. Primary benefits are health, comfort, safety, and affordability for occupants, as well as environmental protection and natural resource management. Including an incentive shows the community that the local government strongly encourages participation from the general public.

## *RESOURCES:*

City of Gainesville Green Building Program

[http://www.aia.org/static/state\\_local\\_resources/adv\\_sustainability/Model%20Language/Gainsville\\_ordinance.pdf](http://www.aia.org/static/state_local_resources/adv_sustainability/Model%20Language/Gainsville_ordinance.pdf)

Florida Green Building Coalition (FGBC)

<http://www.floridagreenbuilding.org>

US Green Building Council (USGBC LEED)

<http://www.usgbc.org>

Florida Home Energy Ratings

[http://dbase.fsec.ucf.edu/pls/engauge/rating\\_search](http://dbase.fsec.ucf.edu/pls/engauge/rating_search)

## **Credit 3: Preserve/enhance native habitat and natural resources.**

### *REQUIREMENT:*

- a) Require mitigation for consumption of natural habitat or resources. (1 point per land type – maximum 5 points)
- b) Enact and enforce a tree preservation or land-clearing ordinance. (1 point)
- c) Regulate impervious parking surfaces. (1 point)
- d) Enact a septic system replacement ordinance. (1 point)

### *APPROACH:*

- a) When native habitat or other ecologically significant lands such as wetland, agricultural land, high water recharge area, wildlife corridor, etc. is consumed for development, require mitigation through purchase and maintenance of similar amount of adjacent land with similar significance. If mitigation land exceeds 50 acres, require an individual be dedicated to ensuring successful preservation during development. If mitigation land exceeds 1,000 acres, require the developer to retain the position for at least 10 years. Alternatively, require the project to comply with an appropriate Florida Green Building Coalition standard.
- b) Tree preservation/land clearing ordinance can be in form of protection, mitigation, canopy continuity, or % shading requirements. Must require a tree survey prior to any land clearing, and must include financial penalty for removal of trees in addition to planting of new trees.

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- c) New impervious parking surface to be limited to serve 50% of permanent building occupants / peak visitors. All additional parking to be pervious. Shared parking facilities must be encouraged (e.g., do not require a church and bank that are next to one another to have as much parking as if they were in separate locations).
- d) Require residents with septic systems to hookup to central wastewater treatment when available.

### *SUGGESTED DOCUMENTATION:*

Submit written documentation of all ordinances and regulations for which credit is desired.

### *BENEFIT:*

- a) Ecologically significant lands are important to be preserved in order to retain biodiversity, local food production, and to provide means for aquifer recharge and storm water treatment.
- b) Land development often completely removes existing vegetation, and attempts to replace it post-construction. Replacement is often inadequate, and removal displaces wildlife, and leads to erosion, adding to storm water runoff and treatment concerns.
- c) Land dedicated for impervious parking is often unnecessarily sized according to peak demand. Excessive impervious surface contributes to storm water runoff, and heat island effects.
- d) Many aging septic systems are operating beyond their useful service life, and provide for inadequate treatment. Provide for central sewer throughout the city/county to reduce pollutant load entering natural systems.

### *RESOURCES:*

Florida Green Building Coalition

<http://www.floridagreenbuilding.org>

Brevard County aquifer protection ordinance

[http://www.brevardcounty.us/environmental\\_permitting/assets/documents/pdf/aquifer\\_protection.pdf](http://www.brevardcounty.us/environmental_permitting/assets/documents/pdf/aquifer_protection.pdf)

Brevard County land clearing and tree protection ordinance

[http://www.brevardcounty.us/environmental\\_permitting/documents/ARTICLEXIIIDIVISION3LandClearingandTreeProtection.pdf](http://www.brevardcounty.us/environmental_permitting/documents/ARTICLEXIIIDIVISION3LandClearingandTreeProtection.pdf)

Volusia County Tree Protection Ordinance

<http://www.volusia.org/environmental/permitting/trees/NewTreeOrd.pdf>

Sarasota County Canopy Road Ordinance

<http://www.scgov.net/sustainability/documents/canopyord2001041.pdf>

Alternatives to impervious pavement

<http://www.uri.edu/> Search: Impervious

### **Credit 4: Conserve water resources**

### *ACTIVITY:*

- a) Enact a rain sensor ordinance with inspection and enforcement applicable to all functioning automatic irrigation systems. (2 points applicable if not met)
- b) Enact a landscaping ordinance for new construction (1 point) and implement enforcement. (2 points)

### *APPROACH:*

- a) Require that all automatic irrigation systems have a functioning rain shut off device and provide inspection and enforcement of the ordinance. Assist with retrofit where necessary by underwriting

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part of the cost in demonstrated hardship cases, including soil moisture sensors and climate-based controllers.

- b) Enact a landscaping ordinance that follows the Florida Department of Environmental Protection's Landscape Irrigation and Florida Friendly Design Standards for 1 point. Implement enforcement of the ordinance by utilizing trained irrigation auditors for 2 additional points.
- c) Enact new construction plumbing standards more stringent than EPA Act 1992 referencing the EPA Water Sense Program. (2 points)
- d) Enact retrofit ordinance upon water hookup or resale for landscaping and indoor water fixtures. (2 points)

### *SUGGESTED DOCUMENTATION:*

Submit a copy of the ordinance, enforcement techniques and copies of recent violations.

### *BENEFIT:*

- a) Presence of a functioning rain sensor is a requirement of the 2001 Florida Building Code (373.62) for new construction. However, there are many more automatic irrigation systems operating in Florida that were installed before this requirement was included in the code. Retrofitting older systems with rain shut-off control acts as an effective water conservation strategy.
- b) FDEP's Florida friendly landscape standards focus on native, drought tolerant plant material grouped according to watering needs. Appropriate turf varieties are limited to pet, play, and entertainment needs. If automatic watering is desired, multiple program controllers can be employed to deliver no more water than what is required by each group. Irrigation systems themselves are also designed to then deliver that water as efficiently as possible. Enforcement should be implemented to ensure the requirements and proper techniques are being utilized.
- c) The 2007 Florida Building Code for plumbing references EPA Act 1992, a standard written over 15 years ago. Significant improvements in fixture efficiency have developed since then, including Toilets that reduce their water use by 20% that are tested and recognized by the EPA's WaterSense program. Implementing modern standards would result in significant water resource reductions.
- d) Retrofitting to more efficient indoor fixtures and Florida friendly landscaping is a great source of water conservation.

### *RESOURCES:*

Volusia County rain sensor ordinance

[http://www.volusia.org/environmental/pollution\\_abatement/Water%20Resources/Waterwise%20Ordinance%20final.pdf](http://www.volusia.org/environmental/pollution_abatement/Water%20Resources/Waterwise%20Ordinance%20final.pdf)

Brevard County landscaping ordinance

[www.brevardcounty.us/environmental\\_permitting/documents/ARTICLEXIIDIVISION2Landscaping.pdf](http://www.brevardcounty.us/environmental_permitting/documents/ARTICLEXIIDIVISION2Landscaping.pdf)

Volusia County Waterwise landscape ordinance

[www.volusia.org/environmental/pollution\\_abatement/Water%20Resources/landscapeordinance.htm](http://www.volusia.org/environmental/pollution_abatement/Water%20Resources/landscapeordinance.htm)

Florida Green Local Government Standard Environmental Landscaping Module and Video

<http://www.dnr.state.wi.us/org/water/wm/nps/rg>

2007 Florida Building Code: Appendix F

<http://www.floridabuilding.org>

FDEP Landscape Irrigation and Florida Friendly Design Standards

[http://www.dep.state.fl.us/water/waterpolicy/land\\_irr.htm](http://www.dep.state.fl.us/water/waterpolicy/land_irr.htm)



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Miami Dade Water Efficiency Manual

[http://www.miamidade.gov/conservation/new\\_construction.asp](http://www.miamidade.gov/conservation/new_construction.asp)

## ***Education***

### **Credit 5: Staff education.**

#### ***ACTIVITY:***

- a) Require all inspectors, reviewers, and supervisors to complete four hours of CEU approved course in green building on a bi-annual basis. (1 point)

#### ***APPROACH:***

Several green building courses are offered on a regular basis throughout the state such as the University of Florida's Build Green and Profit course. This course, as well as others, can also be brought to your specific location.

#### ***SUGGESTED DOCUMENTATION:***

Research and provide list of applicable courses offered that employees may leverage. Approximate and submit budget based on average travel and course registration costs.

#### ***BENEFIT:***

In order for green building techniques to be implemented effectively and efficiently, staff should have a general comprehension of the benefits, and applicability.

#### **RESOURCES:**

University of Florida Build Energy Extension Service

<http://www.energy.ufl.edu/>

Florida Solar Energy Center Building Science Training and Certification Center

[http://www.floridaenergycenter.org/en/education/cont\\_ed/bldg/index.htm](http://www.floridaenergycenter.org/en/education/cont_ed/bldg/index.htm)

[http://www.fsec.ucf.edu/ed/contin\\_ed/bldg\\_sci.htm](http://www.fsec.ucf.edu/ed/contin_ed/bldg_sci.htm)

### **Credit 6: Industry education.**

#### ***ACTIVITY:***

- a) Department offers classes to industry professionals that detail any green incentives or regulations present. (1 point)
- b) Department advertises and offers incentives for local construction industry professionals to attend green building classes offered by others. (1 point)
- c) Conduct a green building awards program. (1 point)

#### ***APPROACH:***

- a) Short courses/seminars are held either through building department or in conjunction with local HBA to brief builders/developers on green incentives/regulations present.
- b) Building department offers to pay at least half the cost for local industry professionals to attend CEU courses in green building to help achieve local government goals.

# Florida Green Local Government Designation Reference Guide

- c) A green building awards program is conducted by the department, which can also be conducted in conjunction with local HBA or FGBC.

## *SUGGESTED DOCUMENTATION:*

- a) Submit seminar schedule and agenda.
- b) Provide copy of advertisement.
- c) Describe framework of awards program including actual awards, and basis for qualification.

## *BENEFIT:*

Local governments can encourage implementation of green building by ensuring local industry is educated on techniques and benefits, and acknowledged for their efforts.

## *RESOURCES:*

City of Gainesville Green Building Program

[http://www.aia.org/static/state\\_local\\_resources/adv\\_sustainability/Model%20Language/Gainsville\\_ordinance.pdf](http://www.aia.org/static/state_local_resources/adv_sustainability/Model%20Language/Gainsville_ordinance.pdf)

## **Credit 7: Community education.**

## *ACTIVITY:*

- a) Publicity and case studies for green building. (1 point)

## *APPROACH:*

Through the local government's website, through printed material, through television/radio commercials, or otherwise, create and distribute publicity for the city/county green building program (if in effect) and/or green projects within the city/county.

## *SUGGESTED DOCUMENTATION:*

Provide narrative of plans to publicize green building within the community and provide at least one example or draft of example.

## *BENEFIT:*

When green building takes place, many persons and organizations both directly related to the project as well as indirectly benefit. It is important to publicize efforts towards green building, as an incentive for those involved, as well as an effort to gain support and interest of others.

## *RESOURCES:*

City of Gainesville Green Building Program

[http://www.aia.org/static/state\\_local\\_resources/adv\\_sustainability/Model%20Language/Gainsville\\_ordinance.pdf](http://www.aia.org/static/state_local_resources/adv_sustainability/Model%20Language/Gainsville_ordinance.pdf)

## **D - ECONOMIC DEVELOPMENT / TOURISM**

### *Lead by Example*

#### **Credit 1: Green building to spur economic development.**

##### *ACTIVITY:*

- a) Create an eco-tourism campaign. (1 point)
- b) Track amount of tourism that takes part in eco-related activities. (1 point)

##### *APPROACH:*

Identify environmental attractions of the local area and develop an eco-tourism campaign as a form of economic development. Track tourism through hotel surveys or otherwise for activities such as fishing, hiking, biking, or attendance at eco-related festivals.

##### *SUGGESTED DOCUMENTATION:*

Provide a survey of local environmental attractions (parks, beaches, lakes, trails, etc) and describe plans to promote such attractions to people visiting the area. Submit details of how local eco-tourism activities are tracked.

##### *BENEFIT:*

Ecotourism is a growing interest of national and international visitors alike, and a successful campaign can improve economic development through increased tourism. By creating economic benefit from natural features there should be increased support for resource protection.

##### *RESOURCES:*

Volusia County ECHO Tourism Campaign

<http://echotourism.com/>

Visit Gainesville

<http://www.visitgainesville.net/>

#### **Credit 2: Green building through historic preservation/downtown revitalization**

##### *ACTIVITY:*

- a) Achieve Florida Main Street Designation. (1 point)

##### *APPROACH:*

Undertake process and actions required to be designated a Florida Main Street. Counties may achieve points by assisting at least one city with the process.

##### *SUGGESTED DOCUMENTATION:*

Submit copy of Florida Main Street designation, completed application package or a checklist of the principles implemented.

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## *BENEFIT:*

Becoming a Florida Main Street shows the local government's commitment to management of downtown historic areas, and acts to both preserve and promote this feature to the community and abroad.

## *RESOURCES:*

Florida Main Street Program

<http://dhr.dos.state.fl.us/preservation/architecture/mainstreet/>

## ***Control***

### **Credit 3: Local business incentives.**

#### *ACTIVITY:*

- a) Incentives for location of green businesses within city/county. (1 point)
- b) Offer special promotion for local eco-hotels. (1 point)
- c) Create or promote a green business certification program. (1 point)

#### *APPROACH:*

Combine promotion of participation in the Florida Green Local Government Program with eco-friendly business incentives in order to attract sustainable industry or businesses that employ sustainable practices to the local area. Provide marketing incentives for local eco-hotels that have met the Florida Department of Environmental Protection Green Lodging Criteria. Provide recognition to local businesses that operate on green building principles.

#### *SUGGESTED DOCUMENTATION:*

Develop and submit documentation describing specific incentives available for establishment of businesses/non-profits that specialize in green building products, services, education, or outreach. Describe how local eco-hotels or businesses are given promotional incentives.

## *BENEFIT:*

Establishing business incentives help attract sustainable businesses to the community that foster implementation and acceptance of green building, attract sustainably minded employees, and provide for community wide economic and environmental benefits.

## *RESOURCES:*

Sustainable Sarasota Green Business Development Assistance

<http://www.scgov.net/GreenBusiness/>

Florida DEP Green Lodging Program

<http://www.dep.state.fl.us/GreenLodging/>

### **Credit 4: Revitalize distressed areas.**

#### *ACTIVITY:*

- a) Incentives for green redevelopment. (2 points)

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## *APPROACH:*

Either through the creation of redevelopment agencies or otherwise, create and offer incentives (tax based, building based, land based, etc) for redevelopment of distressed areas via green development.

## *SUGGESTED DOCUMENTATION:*

Provide copy of proposed incentives, management plan, and baseline requirements for eligibility.

## *BENEFIT:*

Green redevelopment generally involves the local community, and shows that the city/county considers the distressed area an integral part of the community, and desires that redevelopment plans ensure the continued sustainability of the area.

## **Credit 5: Historic preservation**

### *ACTIVITY:*

- a) Develop a historic preservation ordinance. (1 point)
- b) Develop funding mechanism to aid with historic preservation. (1 point)

### *APPROACH:*

Develop a register of historic buildings within the city/county, and create an ordinance designed to protect such properties. As a next step, budget funds to aid with protection of historic properties.

### *SUGGESTED DOCUMENTATION:*

Submit language for ordinance, and/or details regarding acquiring and maintaining historic preservation funds.

### *BENEFIT:*

Preserving a community's history through protection of historic properties maintains appropriate land use and provides educational opportunities.

### *RESOURCES:*

Historic Preservation info from the Florida Department of State  
<http://dhr.dos.state.fl.us/preservation/>

## ***Education***

No criteria identified.

## **E - EMERGENCY MANAGEMENT / PUBLIC SAFETY**

### *Lead by Example*

#### **Credit 1: Reduce green house gas emissions.**

##### *ACTIVITY:*

- a) Use of AFV and/or bicycle patrol for urban/neighborhood areas. (1 point)
- b) Use renewable energy as backup / emergency power. (1 point)

##### *APPROACH:*

Police departments / neighborhood watch employ alternative fueled vehicles (AFV) and/or bicycles for light duty patrols. Shelters and roving disaster assistance employs photovoltaics for some percentage of backup power rather 100% supplied by fossil fuel generators.

##### *SUGGESTED DOCUMENTATION:*

- a) Submit details of vehicles used for light duty patrols.
- b) Describe use of renewable energy as backup/emergency power.

##### *BENEFIT:*

All activities are geared towards reducing release of pollutants to the atmosphere. Along with reducing air pollution, alternative vehicles often make patrols more accessible to the public.

##### *RESOURCES:*

Ft. Lauderdale Police Department Bicycle Patrol

<http://info.ci.ftlaud.fl.us/police/bicycle.html>

US DOE Clean Cities Program

<http://www.eere.energy.gov/cleancities/>

Florida Space Coast Clean Cities Coalition

<http://www.clean-cities.org/>

Florida Gold Coast Clean Cities Coalition

<http://www.sfrpc.com/fgcccc.htm>

Photovoltaics for Disaster Relief

<http://www.floridaenergycenter.org/en/consumer/disaster/index.htm>

Florida Green Local Government Standard Fleet Management and Vehicle Maintenance Module

#### **Credit 2: Reduce solid and hazardous waste.**

##### *ACTIVITY:*

- a) Maintain green fleets. (1-3 points)
- b) Firing ranges utilize non-lead bullets or trap and collect fragments. (1 point)
- c) Minimize photo-processing waste. (1 point applicable if not met)

##### *APPROACH:*

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Incorporate at least 75% of the applicable best management practices outlined in chapters C-M of the Florida Green Local Government Standard Fleet Management and Vehicle Maintenance Module. One point per fleet (police, fire, etc.) is available. All firing ranges use non-lead (ceramic) bullets or employ a means to reclaim lead before entering ecosystem. Police photo processing minimizes waste by employing digital technology, recycling chemicals in house, or contracting with an outside entity that employs recycling.

## *SUGGESTED DOCUMENTATION:*

- a) Describe the green fleet program used for emergency vehicle purposes.
- b) Submit documentation of strategy employed to reduce lead resulting from firing ranges.
- c) Submit documentation of strategy to reduce photo-processing waste.

## *BENEFIT:*

Stewardship towards pollution prevention activities is often ignored in departments that deal with emergencies/public safety. Certain simplistic measures can be employed to improve the environmental performance of such departments.

## *RESOURCES:*

Florida Green Local Government Standard Fleet Management and Vehicle Maintenance Module and Posters

FL Department of Environmental Protection Lead Management at Florida Shooting Ranges

<http://www.dep.state.fl.us/waste/categories/hazardous/pages/lead.htm>

US Army Environmental Center Small Arms Range Technology

<http://aec.army.mil/usaec/technology/rangexxi03.html>

National Park Service Firing Range Waste Management

<http://www.nps.gov/archive/grca/compliance/firing-ranges.htm>

US EPA Photo Processing Information

<http://www.epa.gov/epaoswer/hazwaste/id/infocus/photofin.pdf>

FL DEP Photo Shop Hazardous Waste Management

[http://www.dep.state.fl.us/waste/quick\\_topics/publications/shw/hazardous/photoshops04.PDF](http://www.dep.state.fl.us/waste/quick_topics/publications/shw/hazardous/photoshops04.PDF)

## **Credit 3: Conserve water**

## *REQUIREMENTS:*

- a) Fire departments review training operations and conserve water where appropriate. (1 point)

## *APPROACH:*

Where procedure allows, training exercises are configured to collect and reuse water where possible.

## *SUGGESTED DOCUMENTATION:*

Describe strategy, system, or operation that allows water collection and reuse during training activities.

## *BENEFIT:*

Stewardship towards water conservation is often ignored in departments that deal with emergencies/public safety. Certain simplistic measures can be employed to improve the environmental performance of such departments.



***Control***

**Credit 4: Enhance durability of built environment.**

***ACTIVITY:***

- a) Incentives for disaster mitigation. (1 point)

***APPROACH:***

Emergency management teams with appropriate sources to offer rebates or low interest loans for mitigation upgrades applied to new and existing commercial and residential buildings.

***SUGGESTED DOCUMENTATION:***

- a) Submit details of incentive program and dollar amounts available.

***BENEFIT:***

Providing a mechanism that assists the public enhance the durability of the built environment may lessen the local government's risk during disasters.

***RESOURCES:***

City of Deerfield Beach "Operation Open for Business Program"

[http://www.floridadisaster.org/brm/Mit\\_Success/ms\\_broward\\_deerfield\\_beach\\_showc.htm](http://www.floridadisaster.org/brm/Mit_Success/ms_broward_deerfield_beach_showc.htm)

***Education***

**Credit 5: Community education.**

***ACTIVITY:***

- a) Offer mitigation audits to homes, businesses, and local government buildings. (1 point)
- b) Create an education campaign for mitigation (shelters point out features with signs, etc.) (1 point)

***APPROACH:***

Emergency Management conducts free or low cost audits of buildings to identify opportunities for mitigation. Community knowledge of mitigation features is strengthened through educational material, as well as drawing attention to features present at local shelters.

***SUGGESTED DOCUMENTATION:***

- a) Provide details of building audit program.
- b) Submit elements of education campaign including advertisements for courses, course agendas, or demonstration activities at local shelters.

***BENEFIT:***

Providing outreach to the local community may assist with actual implementation of disaster mitigation within the local built environment.

***RESOURCES:***

# Florida Green Local Government Designation Reference Guide

City of Deerfield Beach “Operation Open for Business Program”

[http://www.floridadisaster.org/brm/Mit\\_Success/ms\\_broward\\_deerfield\\_beach\\_showc.htm](http://www.floridadisaster.org/brm/Mit_Success/ms_broward_deerfield_beach_showc.htm)

US FEMA Mitigation Division Education Information

<http://www.fema.gov/about/divisions/mitigation.shtm>

## **Credit 6: Staff training.**

### *ACTIVITY:*

- a) Police trained in crime prevention through environmental design. (1 point)
- b) Public safety staff attends training on Healthy Street design. (1 point)

### *APPROACH:*

Appropriate law enforcement personnel required to attend one time course in crime prevention through environmental design (CPTED) and/or “Street Design Guidelines for Healthy Neighborhoods”. Healthy Street Design encourages pedestrian access through the use of narrow streets whose design still enables access to emergency vehicles.

### *SUGGESTED DOCUMENTATION:*

Details of courses provided, agendas, and instructor.

### *BENEFIT:*

Often, environmental stewardship is ignored when it comes to crime protection and public safety. With proper training and experience, knowledge of environmental issues can actually enhance crime prevention and public safety.

### *RESOURCES:*

CPTED Handbook

<http://www.cpted-watch.com/>

CPTED training

[http://www.nicp.net/cpted\\_conference.htm](http://www.nicp.net/cpted_conference.htm)

FL Department of Transportation Walkable Communities: 12 steps to an Effective Program

[http://www.dot.state.fl.us/safety/ped\\_bike/brochures/pdf/12STEPS.PDF](http://www.dot.state.fl.us/safety/ped_bike/brochures/pdf/12STEPS.PDF)

Healthy Street Design Training

<http://www.walkable.org/services.htm>

Traffic Calming.org

<http://www.trafficcalming.org/>

## **F - ENERGY UTILITY**

### ***Lead by Example***

#### **Credit 1: Reduce green house gas emissions through renewable energy and energy efficiency.**

##### ***ACTIVITY:***

- a) Offer green power. (1 point)
- b) Certify renewable electricity products under Center for Resource Solutions. (1 point)
- c) Voluntary funding of green power through customer billing. (1 point)
- d) Become an Energy Star ally. (1 point)

##### ***APPROACH:***

Acquire green power generation capability and offer to interested customers. Additional points available for certification of green power under Center for Resource Solutions' Green-E program. If in pursuit of green power capability, points are available for allowing customers to voluntarily fund efforts through bill donations. Points are also available for promoting energy efficiency on the demand side by becoming a US EPA Energy Star ally.

##### ***SUGGESTED DOCUMENTATION:***

- a) Describe green power generation capacity and any cost difference to consumers compared to standard generation.
- b) Submit proof of participation in Green-E program.
- c) Describe elements of consumer funding effort to acquire future green power.
- d) Copy of EPA Energy Star ally application.

##### ***BENEFIT:***

Many customers desire green power as an alternative to conventional power generation. Many are willing to contribute to the effort through monetary donations, or increased rates. Becoming an Energy Star ally shows the utility's commitment to reducing green house gas emissions.

##### ***RESOURCES:***

Gainesville Regional Utilities Green Energy

<http://www.gru.com/OurEnvironment/GreenEnergy/gruGreen.jsp>

Jacksonville JEA Clean Power

<http://www.jea.com/community/cleanpower.asp>

Green-E Renewable Energy Certification Program

[http://www.green-e.org/ipp/ipp\\_index.html](http://www.green-e.org/ipp/ipp_index.html)

New Smyrna Beach Utilities Commission Green Pricing Program

<http://apps3.eere.energy.gov/greenpower/markets/pricing.shtml?page=2&companyid=256>

Energy Star ally information for Utilities

[http://www.energystar.gov/index.cfm?c=join.reps\\_agree](http://www.energystar.gov/index.cfm?c=join.reps_agree)

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## **Credit 2: Reduce waste.**

### *ACTIVITY:*

- a) Actively promote fly ash / blast furnace slag source. (1 point)
- b) Enable customers to make online bill payments or utilize recycled paper. (1 point)

### *APPROACH:*

Waste fly ash and blast furnace slag is a useful replacement for Portland cement in concrete mixtures. Points are available for actively promoting the availability of such material, and seeking end users of the product. Examples include partnering with the Southern Waste Information Exchange (SWIX). All customer billing should include post consumer recycled content or allow customers to elect an online bill payment option whereby no paper mailing is sent.

### *SUGGESTED DOCUMENTATION:*

- a) Describe details of how this resource is promoted for availability.
- b) Provide internet site of online bill pay system or submit example paper.

### *BENEFIT:*

Pollution prevention and waste management activities can save money for the utility, and minimize solid waste.

### *RESOURCES:*

Southern Waste Information Exchange

<http://www.wastexchange.org>

Gainesville Regional Utilities Fly Ash Recycling

<http://www.gru.com/OurEnvironment/CorporateRecycling/flyash.jsp>

Jacksonville JEA Bill Pay Options

<http://www.jea.com/customer/payment/index.asp>

Gainesville Regional Utilities Bill Pay Options

<http://www.gru.com/YourHome/AboutYourBill/paymentoptions.jsp>

## ***Control***

## **Credit 3: Incentives to reduce energy use.**

### *ACTIVITY:*

- a) Offer distributed generation incentives. (1 point)
- b) Offer energy audits. (1 point)
- c) Commercial building incentives. (1 point)
- d) Residential building incentives. (1 point)
- e) Rate structures based on consumption. (1 point)

### *APPROACH:*

Incentives and assistance should be made available for customers who wish to use photovoltaics, or other types of onsite energy production. Incentives include co-purchasing/co-ownership of equipment, net metering, etc. Free/discounted energy audits should be made available either through in-house staff

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or outside contractors for qualifying commercial and residential customers. Other commercial and residential building incentives such as lighting incentives, insulation upgrades, efficient equipment rebates etc. should be made available to qualifying customers. Structure usage rates to discourage over consumption by allowing charges to increase with increasing energy use.

## *SUGGESTED DOCUMENTATION:*

To achieve the points listed for each activity, submit a description of the activity.

## *BENEFIT:*

Offering incentives to the community to reduce energy usage can help provide energy security for the city/county.

## *RESOURCES:*

Gainesville Regional Utilities Solar Rebate Program

<http://www.gru.com/OurEnvironment/GreenEnergy/solar.jsp>

Gainesville Regional Utilities Dual Metering Program

<http://www.gru.com/OurEnvironment/GreenEnergy/dualMetering.jsp>

Jacksonville JEA Solar Incentive Program

<http://www.jea.com/services/electric/solar.asp>

New Smyrna Beach Utilities Commission Energy Audits

<http://www.ucnsb.net/electric/energy-audit.aspx>

## ***Education***

### **Credit 4: Community education.**

#### *ACTIVITY:*

- a) Informative billing. (1 point)
- b) Take part in any speaker's bureau or sponsor workshops. (1 point)
- c) Emissions info posted on website. (1 point)
- d) Enable customers to track and analyze their usage via the internet. (1 point)
- e) Initiate a community-wide energy efficiency challenge. (2 points)

#### *APPROACH:*

Develop informative billing that educates customers about current and past usage. Actively engage staff in promoting energy efficiency through speaking opportunities, or sponsor others to conduct workshops. Develop and post an "environmental report" on a website that details process of power production including raw materials consumed, processing specifics, and emissions information. Develop an online system whereby customers can access account history and evaluate performance based on other users with similar characteristics. Offer suggestions for users to reduce usage. Create or utilize a program such as EPA's Energy Star Portfolio Manager to encourage energy management and conservation. Earn 1 point for a residential campaign and an additional point for a commercial challenge.

#### *SUGGESTED DOCUMENTATION:*

- a) Submit copy of an example bill.

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- b) Submit names and qualifications of utility employees willing to take part in a speakers bureau, and topics they would be willing to discuss, or examples of sponsored workshops.
- c) Provide internet link where one would find utility emissions info.
- d) Provide internet link to website where customers can gain access to energy usage information.
- e) Provide a website link or a program description with historical energy usage.

### *BENEFIT:*

A strategic means to encourage conservation is to actively take part in consumer education.

### *RESOURCES:*

Jacksonville JEA Billing information

<http://www.jea.com/customer/mybill/page1-front.asp>

Jacksonville JEA Workshops

<http://www.jea.com/business/services/devandbuild/workshop.asp>

Jacksonville JEA Speakers Bureau

<http://www.jea.com/community/education/teacher/speaker.asp>

Gainesville Regional Utilities Customer Account Information

<http://www.jea.com/community/education/teacher/speaker.asp>

BOMA: Building Owners and Managers Association

<http://www.boma.org/getinvolved/7pointchallenge/Pages/default.aspx>

EPA Energy Star Portfolio Manager

[http://www.energystar.gov/index.cfm?c=evaluate\\_performance.bus\\_portfoliomanager](http://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager)

### **Credit 5: Staff education.**

### *ACTIVITY:*

- a) Send appropriate staff for training related to distributed generation. (1 point)
- b) Send appropriate staff for energy audit training. (1 point)

### *APPROACH:*

Many courses are offered through state agencies such as the Florida Solar Energy Center that will enable staff to assist customers with demand side management. Such courses include Installation of Grid Connected Photovoltaics and Certified Energy Rater training.

### *SUGGESTED DOCUMENTATION:*

Submit details of courses to be attended, and names/numbers of personnel that have or will be trained by such courses.

### *BENEFIT:*

Having staff trained in such areas will streamline future adoption of various conservation programs.

### *RESOURCES:*

Florida Solar Energy Center Continuing Education

[http://www.floridaenergycenter.org/en/education/cont\\_ed/index.htm](http://www.floridaenergycenter.org/en/education/cont_ed/index.htm)

## **G - HOUSING AND HUMAN SERVICES**

### ***Lead by Example***

#### **Credit 1: Provide green, affordable housing to the community.**

##### ***REQUIREMENTS***

- a) Construct/renovate green buildings. (1 point per living unit, maximum 20 points)

##### ***APPROACH:***

New affordable housing units should be constructed to the FGBC green home standard in order to score points. Renovated units should score at least 150 points on the Florida Green Home Standard or 75% of other applicable green standard.

##### ***SUGGESTED DOCUMENTATION:***

Submit copies of Green Home Standard Certificates, or completed Green Home Checklists for renovated units.

##### ***BENEFIT:***

Certified green homes not only help with the local government's environmental goals, but also provide healthy, efficient, and durable living environments for the occupants.

##### ***RESOURCES:***

Florida Green Home Standard Designation:

<http://www.floridagreenbuilding.org/db/?q=node/5360>

Alachua County Housing Authority Green Affordable Home

### ***Control***

#### **Credit 2: Increase the affordability of affordable housing.**

##### ***ACTIVITY:***

- a) Affordable housing constructed by city/county and other parties mandated green. (1 point)
- b) Offer incentives for construction of green affordable housing. (1 point)
- c) Offer incentives for location efficient affordable housing. (1 point)

##### ***APPROACH:***

Require that all new affordable housing constructed within the city/county be built to an existing green standard. Alternatively, offer an incentive for the construction of green and/or location efficient housing. Example incentives include tax incentives, permitting incentives or other incentives that equate to at least \$300 per housing unit.

##### ***SUGGESTED DOCUMENTATION:***

Submit copy of mandate/ordinance/incentive program.



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## *BENEFIT:*

Certified green and location efficient homes not only help with the local government's environmental goals, but also provide healthy, efficient, and durable living environments for the occupants.

## *RESOURCES:*

Florida Green Home Designation Standard

<http://www.floridagreenbuilding.org/>

City of Gainesville Green Building Program

<http://fyn.ifas.ufl.edu/materials/gainesville%20-%20greenbuildingprogram.pdf>

## **Credit 3: Improve current stock of affordable housing.**

### *ACTIVITY:*

a) Remodeling of affordable housing mandated green. (1 point)

### *APPROACH:*

Mandate that the renovated units score at least 150 points on the Florida Green Home Standard or 75% of other applicable green standard.

### *SUGGESTED DOCUMENTATION:*

Submit copy of mandate/ordinance/incentive program.

## *BENEFIT:*

Certified green and location efficient homes not only help with the local government's environmental goals, but also provide healthy, efficient, and durable living environments for the occupants.

## *RESOURCES:*

Florida Green Home Designation Standard

<http://www.floridagreenbuilding.org/db/?q=node/5360>

## ***Education***

## **Credit 4: Community education.**

### *ACTIVITY:*

a) Offer orientation classes for residents of affordable housing or refer to existing courses. (1 point)

### *APPROACH:*

Organize and deliver homeowner orientation class to be given to residents that covers important green maintenance and operational aspects of residential housing such as thermostat operation, HVAC filter replacement, and light bulb replacement. Alternatively, existing courses such as the Florida Energy Extension Service "Buy Green and Save" can be leveraged.

### *SUGGESTED DOCUMENTATION:*

Submit copies of course agenda and attendance.

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## *BENEFIT:*

True benefits of green housing are only realized when the occupants understand how their activities interact with the design of the building.

## *RESOURCES:*

Florida Energy Extension Service

<http://www.energy.ufl.edu/>

## **Credit 5: Staff education.**

## *ACTIVITY:*

- a) All applicable staff to complete equivalent of four hours of CEU approved course in green building on a bi-annual basis. (1 point)

## *APPROACH:*

Several green building courses are offered on a regular basis throughout the state such as the University of Florida's Build Green and Profit course, and the Florida Solar Energy Center's Failure Proof Building series. This course, as well as others, can also be brought to your specific location.

## *SUGGESTED DOCUMENTATION:*

Submit titles and agendas of courses taken, and number of staff who attended.

## *BENEFIT:*

Educating staff on green building can assist with implementation of the techniques when projects are specified, and staff can assist with necessary occupant education.

## *RESOURCES:*

University of Florida Build Energy Extension Service

<http://www.energy.ufl.edu/>

Florida Solar Energy Center Building Science Training and Certification Center

[http://www.floridaenergycenter.org/en/education/cont\\_ed/bldg/index.htm](http://www.floridaenergycenter.org/en/education/cont_ed/bldg/index.htm)

## **H - HUMAN RESOURCES**

### ***Lead by Example***

No Criteria Identified.

### ***Control***

#### **Credit 1: Reduce green house gas emissions.**

##### ***ACTIVITY:***

- a) Alternative commuting incentives for local government employees. (2 points)

##### ***APPROACH:***

Examples include acquiring free or discounted public transportation fees for local government employees, offering preferred (such as covered) parking for car pool users, or instituting a bonus system for employees who utilize alternative transportation, such a bicycle commuting. A parking cash out program commuters who are offered subsidized parking are also offered the cash equivalent if they use alternative travel modes.

##### ***SUGGESTED DOCUMENTATION:***

Describe the local government's approach to providing an alternative commuting incentive.

##### ***BENEFIT:***

Providing an incentive for alternative commuting will encourage an increase of employees that participate, furthering goals of reducing air pollution.

##### ***RESOURCES:***

Employer's Commuting Guide

<http://www.sfbike.org/?employers#incentives>

California's Parking Cash-Out Law

<http://www.arb.ca.gov/planning/tsaq/cashout/cashout.htm>

#### **Credit 2: Reduce solid and hazardous waste.**

##### ***ACTIVITY:***

- a) Provide reusable mug / water bottle to all employees. (1 point)

##### ***APPROACH:***

During employee orientation, provide each new employee with a reusable mug and water bottle. Do not provide disposable cups for employees.

##### ***SUGGESTED DOCUMENTATION:***

Provide photo of beverage container provided to employees.

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## *BENEFIT:*

This strategy will enable employees to take an active role in the local government's waste reduction goals.

## *Education*

### Credit 3: Staff education.

#### *ACTIVITY:*

- a) New employee orientation includes general local government commitment to environment. (1 point)
- b) Conduct or refer to special training on one or more green local government programs. (1 point per required training program, maximum 5 points.)

#### *APPROACH:*

During new employee orientation, include a segment that details the local government's commitment to the environment, and the Florida Green Local Government program for one point. Maximum of 5 points available for requiring training specific to one or more of the local government's green programs such as an environmentally preferable purchasing (EPP) program, solid and hazardous waste management and recycling, or green fleet management.

#### *SUGGESTED DOCUMENTATION:*

Provide copies of any printed material used for above mentioned education purposes, or provide agenda to courses employees are referred to.

#### *BENEFIT:*

New employees should be aware of local government's environmental goals, and should be encouraged to participate.

#### *RESOURCES:*

North Carolina Department of Environment and Natural Resources Sustainability Orientation

<http://www.enr.state.nc.us/files/policy-program.pdf>

US EPA EPP Training Tool

<http://www.epa.gov/epp/pubs/eppupdates/update7.pdf>

## **I - INFORMATION SERVICES**

### ***Lead by Example***

#### **Credit 1: Reduce solid and hazardous waste.**

##### ***ACTIVITY:***

- a) Operate local government computer and equipment reuse center. (1 point)
- b) Recycling of end-of-life electronic equipment. (1 point)

##### ***APPROACH:***

A computer and electronic equipment reuse center will arrange for collection of surplus equipment, and make the inventory available to all local government departments. Develop a recycling program for end-of-life electronic equipment.

##### ***SUGGESTED DOCUMENTATION:***

Provide a copy of a brochure, flyer, or web page that is distributed to local government departments explaining the operation of the reuse center. Provide details of recycling effort.

##### ***BENEFIT:***

Computers and equipment considered obsolete for certain purposes may be very capable of performing other tasks within the city/county, and may be in great demand by other employees. When at true end-of-life, proper recycling is an appropriate way to deal with this hazardous waste stream.

##### ***RESOURCES:***

Palm Beach County Solid Waste Authority Business Equipment Reuse Center

[http://www.dep.state.fl.us/waste/quick\\_topics/publications/shw/recycling/InnovativeGrants/IGyear4/finalreport/PalmCountyBERCFinalReportMay2004.pdf](http://www.dep.state.fl.us/waste/quick_topics/publications/shw/recycling/InnovativeGrants/IGyear4/finalreport/PalmCountyBERCFinalReportMay2004.pdf)

Florida's Strategy for End-Of-Life electronics

<http://www.dep.state.fl.us/waste/categories/electronics/default.htm>

Alachua County Computer Reuse Page

<http://www.alachuacounty.us/government/depts/epd/pollution/computers.aspx>

EPA Waste Wise Update: Electronics Reuse and Recycling

<http://www.epa.gov/epaoswer/non-hw/reduce/wstewise/pubs/wwupda14.pdf>

Sarasota County Electronic Disposal Program

<http://www.co.sarasota.fl.us/EnvironmentalServices/SolidWaste/Electronics.asp>

### ***Control***

#### **Credit 2: Conserve energy and resources through policy.**

##### ***ACTIVITY:***

- a) Enact local government policy or IT Power Management system whereby all computer/ancillary equipment is turned off when not in use. (1 point)

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- b) Enact policy whereby all computer/ancillary electronic equipment purchased has conservation features such as standby modes and double sided printing capability. (1 point)

## *APPROACH:*

Do not allow computers, copiers, printers, monitors, etc. to remain on when the equipment is not planned for use for at least 3 hours. Ensure all purchased equipment includes the latest conservation features.

## *SUGGESTED DOCUMENTATION:*

Provide copies of applicable policies.

## *BENEFIT:*

A significant amount of energy can be saved by purchasing equipment with energy conservation features, and ensuring that they are utilized to their fullest extent.

## *RESOURCES:*

Energy Star for Government

[http://www.energystar.gov/index.cfm?c=government.bus\\_government](http://www.energystar.gov/index.cfm?c=government.bus_government)

## *Education*

### **Credit 3: Community education.**

## *ACTIVITY:*

- a) Operate website dedicated to the green local government program. (1 point)
- b) Develop environmental education content for city/county websites, tv programs, etc.

## *APPROACH:*

As a part of the local government website, dedicate a section, page, or area that details the local government's involvement in the green local government standard. At a minimum, the content should link to the standard documents, and detail what criteria is being incorporating to comply with the standard. Develop educational outreach elements for the local community, such as television programs, or website content.

## *SUGGESTED DOCUMENTATION:*

- a) Provide link to the green city/county program website.
- b) Provide examples of educational material.

## *BENEFIT:*

Keeping citizens informed of the city/county's environmental progress will help with education and involvement of the local community.

## *RESOURCES:*

Sustainable Sarasota

<http://www.scgov.net/sustainability/>

Sustainable Alachua County

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<http://www.sustainac.org/>

Miami-Dade Department of Environmental Resources Management

<http://www.co.miami-dade.fl.us/derm/>

Florida Green Local Government Standard Environmental Landscaping Video

## **Credit 4: Staff education.**

### *REQUIREMENTS*

- a) Conduct regular education on energy use/energy savings modes for in-house computers and ancillary equipment. (1 point)

### *APPROACH:*

Conduct training on computer policy for new employees and develop printed material/web based content that updates policy as features/needs change. Conservation features are effective only if used properly.

### *SUGGESTED DOCUMENTATION:*

Provide copy of memo, website, or other means used to educate employees on proper equipment usage.

### *BENEFIT:*

Often times conservation features of equipment are not used properly, virtually negating their benefit.

### *RESOURCES:*

Energy Star for Government

[http://www.energystar.gov/index.cfm?c=government.bus\\_government](http://www.energystar.gov/index.cfm?c=government.bus_government)



## **J - NATURAL RESOURCES MANAGEMENT/ENVIRONMENTAL PROTECTION**

### *Lead by Example*

#### **Credit 1: Preserve / enhance habitat.**

##### *ACTIVITY:*

- a) Become a designated Waterfronts Florida community. (1 point)
- b) Become an Audubon Sustainable Community. (1 point)
- c) Create an endangered lands conservation / purchasing program. (1 point)
- d) Certify community under National Wildlife Federation Wildlife Habitat program. (1 point)
- e) Develop and implement a plan for invasive species removal throughout public lands in the city/county. (1 point)

##### *APPROACH:*

Leverage Waterfronts Florida program to revitalize and promote interest in waterfront areas. Participate in Audubon International's Sustainable Community Program. Create a program that identifies and focuses on the preservation and/or purchase of endangered lands. Develop a plan for and seek certification under the NWF Community Wildlife Habitat program. Create and implement an action plan for the reduction of urban heat islands. Carry out an invasive species removal program on city/county land.

##### *SUGGESTED DOCUMENTATION:*

- a, b, d) Submit official notice of participation in mentioned programs.
- c, e) Provide a description of the program.

##### *BENEFIT:*

Habitat should be preserved and enhanced for the benefit of maintaining biodiversity, and for the general benefit of the community, and visitors to the community.

##### *RESOURCES:*

Waterfronts Florida Partnership Program

<http://www.dca.state.fl.us/fdcp/dcp/waterfronts/index.cfm>

Audubon International Sustainable Communities

<http://www.auduboninternational.org/scp/>

Brevard County Environmentally Endangered Lands Program

<http://www.eelbrevard.com>

National Wildlife Federation Community Wildlife Habitat Program

<http://www.nwf.org/backyardwildlifehabitat/certifyyourcommunity.cfm>

Cool Houston! Urban Heat Islands Reduction Program

<http://www.epa.gov/heatlands/pilot/houston.html>

Brevard County Invasive Exotic Plant Removal

[http://www.brevardcounty.us/environmental\\_management/plants\\_nnips\\_home.cfm](http://www.brevardcounty.us/environmental_management/plants_nnips_home.cfm)

#### **Credit 2: Engage and learn from other similar departments.**

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## *ACTIVITY:*

- a) Become a member of FLERA. (1 point)

## *APPROACH:*

Become a member and participate in the Florida Local Environmental Resource Agencies group. Participate with the FLDEP in their environmental crimes task force.

## *SUGGESTED DOCUMENTATION:*

Submit appropriate application forms.

## *BENEFIT:*

Participating in such groups allows a local government to learn from the endeavors and activities of others.

## *RESOURCES:*

Florida Local Environmental Resource Agencies

<http://www.flera.org>

## ***Control***

### **Credit 3: Minimize greenhouse gas emissions and preserve air quality.**

## *ACTIVITY:*

- a) Offer local tax based or other AFV incentives. (1 point)
- b) Enact automobile emissions regulations for vehicles registered in county. (1 point)
- c) Reduce emissions through retrofit of diesel vehicles. (1 point)
- d) Enact open burning regulations. (1 point)

## *APPROACH:*

Create tax or other incentives for alternative fueled vehicles (AFV) registered within county of at least \$100 per vehicle. Enact an automobile emissions standard for vehicles registered within county. Require all gas stations within jurisdiction to utilize vapor controls on pumps. Prohibit burning of yard wastes, household refuse, and recyclable material. Retrofit diesel vehicles such as buses and heavy equipment to reduce their emissions. Alternatively, offer incentives or purchase and install auxiliary power units (APUs) on older model Class 8 diesel trucks with sleeper berths.

## *SUGGESTED DOCUMENTATION:*

Submit copies of appropriate legislation, ordinance, mandate, project etc.

## *BENEFIT:*

Incentives, ordinances and leadership at the local level can be an effective way of curbing air pollution, and can help prevent an area from being classified as non-attainment by the EPA.

## *RESOURCES:*

Electric Vehicle Incentive Legislation

[http://www.afdc.energy.gov/afdc/vehicles/hybrid\\_electric\\_laws.html](http://www.afdc.energy.gov/afdc/vehicles/hybrid_electric_laws.html)

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Sarasota County Open Burning

<http://www.scgov.net/burnmap/burnmap.aspx>

Florida Green Local Government Standard Green Fleet Management Module

Orange County School Bus Retrofits

<http://www.orangecountyfl.net/cms/orangemedia/countynews/stories/1-29-09+-+Mayor+Crotty's+clean+school+bus+initiative.htm>

Auxiliary Power Units

[http://www.dep.state.fl.us/air/msc/mobile\\_sources.htm](http://www.dep.state.fl.us/air/msc/mobile_sources.htm)

## **Credit 4: Preserve / enhance habitat.**

### *ACTIVITY:*

- a) Coastal areas to enact sea turtle ordinance. (1 point)
- b) Enact a manatee protection plan. (1 point)
- c) Develop a boat facility siting plan. (1 point)

### *APPROACH:*

Sea turtle ordinance dealing with appropriate lighting controls in effect and enforced. Official plan in place that evaluates the siting of all marinas on the basis of preservation of key habitat and endangered species (sea grass beds, manatees, etc.).

### *SUGGESTED DOCUMENTATION:*

Submit copies of the ordinance/plan.

### *BENEFIT:*

Such strategies will help the local government be a steward for marine wildlife and habitat.

### *RESOURCES:*

Florida Fish and Wildlife Commission Sea Turtle Protection Program

<http://www.myfwc.com/seaturtle/>

Florida Fish and Wildlife Commission Manatee Protection Program

<http://www.floridaconservation.org/>

Sarasota County Manatee Protection Plan

<http://www.co.sarasota.fl.us/EnvironmentalServices/ResourceProtection/MPP.asp>

Florida Fish and Wildlife Commission Boat Facility Siting Guide

<http://www.dca.state.fl.us/fdcp/DCP/marinasiting/Boatsite0800.pdf>

## **Credit 5: Conserve water.**

### *ACTIVITY:*

- a) Enact car wash standards. (1 point applicable)
- b) Enact fountain / water feature standards. (1 point)

### *APPROACH:*

Require all new car washes (self serve and automatic) to utilize best management practices as required by state law FS 62-660.803. Require permitting and design review of fountains and water features to

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ensure that best management practices are used such as minimizing water evaporation and other losses, using stormwater, etc.

## *SUGGESTED DOCUMENTATION:*

Submit copies of appropriate ordinance or mandate.

## *BENEFIT:*

By developing or implementing existing conservation strategies for such end uses of water, a significant amount of water can be saved.

## *RESOURCES:*

Texas Water Utilities Association Vehicle Washing Tips

[http://www.twua.org/p2/Tips/Vehicle\\_Washing.html](http://www.twua.org/p2/Tips/Vehicle_Washing.html)

US Environmental Protection Agency Source Water Protection Practices Bulletin

[http://www.epa.gov/safewater/sourcewater/pubs/fs\\_swpp\\_deicinghighway.pdf](http://www.epa.gov/safewater/sourcewater/pubs/fs_swpp_deicinghighway.pdf)

## ***Education***

### **Credit 6: Community education.**

#### *ACTIVITY:*

- a) Pertinent local GIS and other data on city/county website. (1 point)
- b) Air quality index on website. (1 point)
- c) Results from water quality testing on website. (1 point)
- d) Operate an environmental demonstration / learning center. (1 point)

#### *APPROACH:*

Make available environmental GIS data and other data such as aerial photographs, Air Quality Index, water quality testing results from natural water bodies, etc. on local government website. Construct and operate a building/complex that focuses on education of environmental issues related to built environment.

#### *SUGGESTED DOCUMENTATION:*

a-c) Submit appropriate web links to information.

e) Provide a detailed description of the learning center, and educational programs/exhibits contained within.

#### *BENEFIT:*

Educating the community on various environmental issues may increase awareness and public participation.

#### *RESOURCES:*

Sarasota County GIS Info

<http://gis.co.sarasota.fl.us>

St. Johns River Water Management District GIS Data

<http://www.sjrwmd.com/programs/data.html>

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Sarasota County Air Quality Index

<http://www.scgov.net/aqi/aqi.aspx>

Orange County Water Quality

<http://www.orangecountyfl.net/topics/Lakes/Default.asp>

Brevard County Environmental Field Station

[http://www.brevardcounty.us/environmental\\_management/edu\\_field\\_station.cfm](http://www.brevardcounty.us/environmental_management/edu_field_station.cfm)

Florida House Learning Center

<http://sarasota.extension.ufl.edu/FHLC/FlaHouseHome.shtml>

## **K - PARKS AND RECREATION**

### **Lead by Example**

#### **Credit 1: Green public amenities.**

##### *ACTIVITY:*

- a) Maintain organic community gardens. (1 point)
- b) Minimize chlorine in community swimming pools. (1 point)
- c) Install appropriate bicycle security at all public amenities. (1 point)
- d) Public golf courses are Audubon certified. (1 point for 50% of courses certified, 2 points for 100% of courses certified)
- e) Apply green landscaping and irrigation standards, proper waterfront considerations, and integrated pest management to public amenities. (1 point)
- f) Minimize heat island effect / stormwater runoff of recreational areas through trees, highly reflective materials, or pervious surface. (1 point)
- g) Public beaches adhere to Blue Wave Campaign criteria. (1 point per beach)
- h) Implement recycling stations for plastic, glass, and aluminum beverage containers at all recreational areas. (1 point)
- i) Implement energy efficient lighting and controls for outdoor stadiums, courts, parks, and playfields. (1 point)

##### *APPROACH:*

Institute and assist with the maintenance of at least one organic garden as a community amenity. Employ alternative technologies for maintenance of swimming pools such as salt water systems that minimize chlorine use. Place appropriate bicycle racks at public amenities. Achieve Audubon certification for at least one public golf course. Utilize Florida Friendly Landscaping at public amenities. Choose pervious and/or reflective materials for parking lots, walkways, etc and utilize tree canopy. Incorporate Blue Wave Campaign criteria and achieve certification for public beaches. Place recycling containers along with all trash receptacles. Utilize energy efficient bulbs and fixtures, and proper timer controls to ensure public field and stadium lights are not left on overnight.

##### *SUGGESTED DOCUMENTATION:*

- a) Provide description of garden including organic strategies employed, and rules for participation.
- b) Provide cut sheet of alternative system used.
- c) List all public amenities and indicate where bicycle racks are placed.
- d) Provide listing of all golf courses, and provide certificates for ones that are Audubon certified.
- e) Provide standards and techniques employed.
- f) Describe strategy to reduce the heat island effect, and provide locations.
- g) Submit certification or application for Blue Wave Campaign.
- h) Provide photo of appropriate recycling stations, and locations.
- i) Submit appropriate policies for outdoor lighting purchasing and operations targeted at achieving energy conservation goals through appropriate outdoor lighting.

##### *BENEFIT:*

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By “greening” public amenities, local government environmental goals are achieved, and the public is made aware of many of the strategies that can be used on their own private property.

## RESOURCES:

University of Florida IFAS Starting a Community Garden

<http://edis.ifas.ufl.edu/EP124>

Sarasota County Community Garden

<http://sarasota.extension.ufl.edu/Hort/commgarden.shtml>

Salt Water Pool Systems

[http://www.poolplaza.com/pool-school/salt\\_pools.shtml](http://www.poolplaza.com/pool-school/salt_pools.shtml)

Audubon Signature Golf Course

<http://www.auduboninternational.org/programs/acss/golf.htm>

Florida Yards & Neighborhoods Program

<http://fyn.ifas.ufl.edu/>

Florida-Friendly Design Standards

[http://www.floridaagwaterpolicy.com/PDF/Landscape\\_Irrigation\\_Florida\\_Friendly\\_Design.pdf](http://www.floridaagwaterpolicy.com/PDF/Landscape_Irrigation_Florida_Friendly_Design.pdf)

Florida Green Local Government Standard Environmental Landscaping Module

Sarasota County Landscaping Ordinance

<http://sarasota.extension.ufl.edu/Hort/WEL/ord/docs/ord.htm>

Cool Neighborhoods: The measurement of small scale heat islands

<http://www.fsec.ucf.edu/en/publications/html/FSEC-PF-363-01/index.htm>

Alternatives to impervious pavement

<http://www.uri.edu/> Search: Impervious

Blue Wave Campaign

<http://www.cleanbeaches.org/bluewave/bluewave.cfm>

Energy Efficient Lighting

<http://www1.eere.energy.gov/consumer/tips/lighting.html>

Dark Sky Association

<http://www.darksky.org>

## ***Control***

No criteria identified.

## ***Education***

### **Credit 2: Staff education**

#### ***ACTIVITY:***

a) Each staff member trained in an area related to their function on a bi-annual basis. (1 point)

#### ***APPROACH:***

Take advantage of the multitude of green education offered by a local extension service by requiring staff attend at least one course, twice a year, for a total of 6 CEU.

#### ***SUGGESTED DOCUMENTATION:***

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Submit names of staff members and title/agenda for courses they are scheduled for.

## *BENEFIT:*

Training staff in “green building” will enable them to design and implement green strategies in their daily activity.

## **Credit 3: Community education**

### *ACTIVITY:*

- a) Place informative signs and/or brochures at green features of public amenities that detail their benefits. (1 point)

### *APPROACH:*

Individual signs/placards may be placed at each feature, or a collection of information can be made available in a central area for each green amenity.

### *SUGGESTED DOCUMENTATION:*

Submit examples of material of photos of material.

### *REFERENCES:*

Florida Green Local Government Standard Environmental Landscaping posters



## **L - PLANNING AND ZONING**

### ***Lead by Example***

#### **Credit 1: Monitor and track green building within the city/county.**

##### ***ACTIVITY:***

- a) Develop a system of sustainable community indicators related to local government planning. (1 point)
- b) Link indicators to a GIS system. (1 point).
- c) Assist other departments with the tracking of indicators related to their function. (1 point per department – max 5 points).

##### ***APPROACH:***

Develop system of community indicators consisting of at least 10 indicators related to green building. Example indicators include vehicle miles traveled per day, number of pedestrian trips made per day (no automobile used), pedestrian network coverage, proper solar orientation of streets, etc. Achieve additional points for linking the indicators to a Geographic Information System for ease in assessing areas in need of attention. Utilize capabilities to assist other departments with the creation, tracking, and use of functionally related indicators.

##### ***SUGGESTED DOCUMENTATION:***

Submit list of indicators used, and how they are used for planning purposes. Describe whether a GIS system is used in conjunction with those indicators, and whether the knowledge about such a system for planning has been extended to other departments.

##### ***BENEFIT:***

Tracking indicators related to green building can assist in setting future goals related to environmental stewardship within the city/county.

##### ***RESOURCES:***

City of Tampa Community Indicators Report

<http://sustainable.state.fl.us/fdi/fsc/news/wkshp/or1199/indexrpt.pdf>

Orange County Indicators Report

<http://www.hciflorida.org/library/pdfs/Legacy%20Report.pdf>

#### **Credit 2: Preserve / enhance pedestrian travel within the city/county to reduce green house gas.**

##### ***ACTIVITY:***

- a) Maintain a bicycle / pedestrian coordinator on staff. (1 point)
- b) Implement FDOT “12 Steps Towards Walkable Communities” into planning process. (2 points).
- c) Healthy street design is official local government policy. (1 point)

##### ***APPROACH:***

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Bicycle / pedestrian coordinator to be a full time staff position and individual should be involved with review of all city/county planning. Minimize stormwater runoff and reduce greenhouse gas emissions by encouraging walkability and minimizing street width through adoption of FDOT program and/or “Street Design Guidelines for Healthy Neighborhoods” from Walkable Communities, Inc. Earn 1 point for applying 8 of the 12 steps, and 2 points for applying all 12 steps of a walkable community.

## *SUGGESTED DOCUMENTATION:*

- a) Submit name of staff member and brief job description.
- b) Describe how the FDOT recommendations are considered for planning purposes.
- c) Submit a description and examples of implemented practices, of “Street Design Guidelines for Healthy Neighborhoods”.

## *BENEFIT:*

By providing appropriate means of pedestrian travel, vehicle miles can be reduced, thereby assisting with prevention of air pollution.

## *RESOURCES:*

Brevard County Bicycle/Pedestrian Program

[http://www.brevardmpo.com/bike-ped-trails/Bike\\_Ped.htm](http://www.brevardmpo.com/bike-ped-trails/Bike_Ped.htm)

FL Department of Transportation Walkable Communities: 12 steps to an Effective Program

[http://www.dot.state.fl.us/safety/ped\\_bike/brochures/pdf/12STEPS.PDF](http://www.dot.state.fl.us/safety/ped_bike/brochures/pdf/12STEPS.PDF)

Healthy Street Design

<http://www.walkable.org/>

## ***Control***

### **Credit 3: Green building incorporated into city/county planning process.**

## *ACTIVITY:*

- a) Develop urban area boundaries (1 point) and maintain the boundaries without amendments (3 points)
- b) Encourage mixed-use zoning / development. (1 point)
- c) Maintain or reduce net impervious surface area through zoning decisions. (1 point)

## *APPROACH:*

Limit sprawl by developing an urban area boundary that limits city infrastructure. Maintain the urban service boundary between Comprehensive Plan cycles. Do not allow single-use zoning or subdividing for projects over 10 acres. Do not allow re-zoning that will increase the amount of impervious surface through new parking lots, etc., or permit the activity along with appropriate mitigation/controls.

## *SUGGESTED DOCUMENTATION:*

- a) Submit current and historical urban service boundary maps.
- b-c) Submit mandate or ordinance related to mixed-use zoning and new parking areas.

## *BENEFIT:*

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Making appropriate decisions when it comes to zoning and re-zoning can help achieve green local government goals by limiting sprawl, land clearing, wildlife habitat destruction and greenhouse gas production.

## ***Education***

### **Credit 4: Staff education.**

#### ***ACTIVITY:***

- 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 point)

#### ***APPROACH:***

Arrange for speakers from other local governments or professional organizations to give in-house seminars, or leverage other green building training opportunities for staff.

#### ***SUGGESTED DOCUMENTATION:***

Submit overview of seminars, including location, speakers, and agenda.

#### ***BENEFIT:***

Staff education on green building issues can foster new thinking when it comes to local planning.

#### ***RESOURCES:***

Healthy Street Design Training

<http://www.walkable.org/services.htm>

Traffic Calming.org

<http://www.trafficcalming.org>

## **M - PORTS AND MARINAS**

### ***Lead by Example***

#### **Credit 1: Preserve aquatic habitat**

**ACTIVITY:**

- a) Take part in Florida Clean Marina program. (1 point)
- b) Implement advanced stormwater controls and waterfront considerations. (1 point)

**APPROACH:**

Certify marinas under the FLDEP Division of Law Enforcement Florida Clean Marina Program. Implement advanced stormwater controls such as pervious parking and other proper waterfront considerations such as landscaping for erosion control.

**SUGGESTED DOCUMENTATION:**

- a) Submit evidence of certification, or completed program application.
- b) Submit details of advanced controls, and locations where implemented.

**BENEFIT:**

Certified Clean Marinas promote stewardship that significantly reduces hazardous waste discharge, as well as solid waste generation.

**RESOURCES:**

Florida's Clean Marina Program

<http://www.dep.state.fl.us/CleanMarina/>

Florida Yards and Neighborhoods Program

<http://fyn.ifas.ufl.edu/>

### ***Control***

#### **Credit 2: Preserve aquatic habitat**

**ACTIVITY:**

- a) Offer low pollution engine incentives. (1 point)

**APPROACH:**

Offer incentives for customers using environmental controls such as 4-stroke engines, or direct injection 2-stroke engines. Incentives could include reduced slip fees, etc.

**SUGGESTED DOCUMENTATION:**

Provide details of incentive, including approximate dollar amount or equivalent, and participation in the program.

**BENEFIT:**

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Tangible incentives can help offset the cost of advanced equipment encountered by end users.

## *RESOURCES:*

New Hampshire Department of Environmental Services Fact Sheet

<http://www.des.state.nh.us/factsheets/ard/ard-31.htm>

## *Education*

### **Credit 3: Boater education**

#### *ACTIVITY:*

a) Host boater education classes. (1 point)

#### *APPROACH:*

Classes can include elements of Florida Clean Marina Program, endangered/threatened species protection, and protection of crucial habitat such as sea grass beds, etc.

#### *SUGGESTED DOCUMENTATION:*

Provide information on classes including speakers, agenda, and attendance figures.

#### *BENEFIT:*

In order to extend principles incorporated by the city/county, the public should be aware of various programs, and what roles they can play in ensuring success.

#### *RESOURCES:*

Florida's Clean Marina Program

<http://www.dep.state.fl.us/Cleanmarina/>

## **N - PROPERTY APPRAISER / TAX COLLECTOR**

### *Lead by Example*

#### **Credit 1: Monitor and track green buildings.**

*ACTIVITY:*

- a) Include green features / ratings of homes in database. (1-2 points)

*APPROACH:*

For one point, include an indicator of environmental certification for each building within the public database. For two points, include specific environmental features of the buildings in the database.

*SUGGESTED DOCUMENTATION:*

Describe what features of homes are identified.

*BENEFIT:*

Green features increase the market value of homes, and are beginning to influence home buyer decisions.

*RESOURCES:*

Florida Green Building Coalition Project Database

<http://www.floridagreenbuilding.org/db/?q=view/projects>

Florida Home Energy Ratings

[http://dbase.fsec.ucf.edu/pls/engauge/rating\\_search](http://dbase.fsec.ucf.edu/pls/engauge/rating_search)

### *Control*

#### **Credit 2: Incentives for green building.**

*ACTIVITY:*

- a) Tax incentives for certified green properties. (2 points)  
b) Tax incentives for lands qualifying as historic, high water recharge, greenbelt, etc. (2 points)

*APPROACH:*

When determining an assessed value of a home, an “environmental exemption” could be offered for homes and buildings certified under green or Energy Star standards such that the tax base is lowered, acting as an incentive.

*SUGGESTED DOCUMENTATION:*

Describe how the “environmental exemption” and/or tax incentives are structured.

*BENEFIT:*

Green homes benefit the entire community, due to their environmental performance. Tax based incentives is one way to foster construction/renovation of green homes within the community.

# Florida Green Local Government Designation Reference Guide

## *RESOURCES:*

Florida Green Building Coalition Project Database

<http://www.floridagreenbuilding.org/db/?q=view/projects>

Florida Home Energy Ratings

[http://dbase.fsec.ucf.edu/pls/engauge/rating\\_search](http://dbase.fsec.ucf.edu/pls/engauge/rating_search)

## ***Education***

### **Credit 3: Industry education.**

#### *ACTIVITY:*

a) Green education to local lending / real estate industry (1 point).

#### *APPROACH:*

Offer courses to realtors, bank appraisers, and or other local lending professionals on the benefits of green features and green properties.

#### *SUGGESTED DOCUMENTATION:*

Provide details of courses developed in house, or external courses referred to.

#### *BENEFIT:*

Realty, appraisal and lending professionals need to know the inherent benefits of green features, to accurately account for their value in the marketplace.

## *RESOURCES:*

Appraisal Journal Article on Market Value of Energy Efficiency

[http://www.icfi.com/Markets/Community\\_Development/doc\\_files/apj1098.pdf](http://www.icfi.com/Markets/Community_Development/doc_files/apj1098.pdf)

Florida Energy Extension Service

<http://www.energy.ufl.edu>

## **O - PUBLIC TRANSPORTATION**

### *Lead by Example*

#### **Credit 1: Reduce green house gas emissions.**

##### *ACTIVITY:*

- a) Utilize alternative fuels for fleet. (2 points)
- b) Institute a bicycle commuter assistance program. (1 point)
- c) Make amends for vehicles to accommodate bicycles. (1 point)
- d) Engage in carpool/vanpool assistance. (1 point)
- e) Implement and enforce carpool or express bus lanes ( 1 point) and provide express bus service to the suburbs. (1 point)

##### *APPROACH:*

Operate and maintain a fleet that runs on an alternative fuel such as CNG or biodiesel. Develop and maintain a free bicycle-sharing program for select areas of the community. Ensure that public transportation fleet can store bicycles on board. Provide a service that facilitates ride sharing within the city/county, such as carpool assistance or a park and ride express bus. Dedicate a lane of traffic for vehicles with multiple passengers during peak hours, with a system of enforcement for these lanes. Provide satellite transit for suburban areas to travel downtown via express bus.

##### *SUGGESTED DOCUMENTATION:*

Submit number and types of vehicles using alternative fuels, and fuel type chosen. Describe elements of bicycle-sharing program. Submit photo of features that allow public transportation to accommodate bicycles. Submit a website link or flyer detailing ride sharing programs.

##### *BENEFIT:*

Alternative fuels significantly reduce the amount of air pollution generated by a city/county. Encouraging bicycle transportation and carpooling can help reduce traffic, private vehicle miles traveled and air pollutants.

##### *RESOURCES:*

Florida Green Local Government Standard Fleet Management and Vehicle Maintenance Module  
Portland, OR Community Cycling Center Programs

<http://www.communitycyclingcenter.org/index.php/on-the-road-with-cycle-oregon-2008-2/>

Gainesville Bikes on Buses

<http://www.go-rts.com/bikes.html>

Space Coast Area Transit Car Pool Matching

[http://www.ridescat.com/forms/commuter\\_info\\_request.php](http://www.ridescat.com/forms/commuter_info_request.php)

Commuter Financial Incentives

<http://www.vtpi.org/tdm/tdm8.htm>

#### **Credit 2: Analyze transportation routes.**



# Florida Green Local Government Designation Reference Guide

## *ACTIVITY:*

- a) Analyze public transportation route system to determine connectivity to bicycle and pedestrian network, (1 point) and submit examples of project accomplishments implemented within 5 years of plan completion. (1 point)

## *APPROACH:*

Using GIS or other means, analyze the public transportation route system to determine connectivity to the bicycle and pedestrian network. Make bicycle paths available to at least 50% of neighborhoods to business districts. Make bicycle paths available to schools, colleges and community colleges.

## *SUGGESTED DOCUMENTATION:*

Submit overview of study, and degree of connectivity to bicycle and pedestrian network. Provide project goals, details and accomplishments.

## *BENEFIT:*

Sometimes small changes in public transportation routes can enhance ridership, especially if stops are easily accessible on foot or bicycle.

## *RESOURCES:*

City of Tallahassee Bicycle/Pedestrian Program  
<http://www.crtpa.org/html2/bikeped06.htm>

## **Credit 3: Reduce solid and hazardous waste.**

## *ACTIVITY:*

- a) Operate a green fleet. (1 point)

## *APPROACH:*

Incorporate at least 75% of the applicable best management practices outlined in chapters C-M of the Florida Green Local Government Standard Fleet Management and Vehicle Maintenance Module.

## *SUGGESTED DOCUMENTATION:*

Submit details of green fleet management plan.

## *BENEFIT:*

Green fleets significantly reduce the generation of solid and hazardous waste by the local government.

## *RESOURCES:*

Florida Green Local Government Standard Fleet Management and Vehicle Maintenance Module and Posters

## ***Control***

No criteria identified.

## ***Education***

# Florida Green Local Government Designation Reference Guide

## **Credit 4: Community education.**

### *ACTIVITY:*

- a) Provide public transportation route searching via the internet. (1 point)
- b) Provide information about alternative commuting on website. (1 point)

### *APPROACH:*

Operate a website where routes are displayed. Another approach would allow citizens to determine an available public transportation route by entering a starting point and ending destination. Also provide content that suggests and explains other methods of commuting, such as bicycle commuting or carpools.

### *SUGGESTED DOCUMENTATION:*

Submit website address.

### *BENEFIT:*

Access to public transportation routes over the internet allows for easier planning for riders when using the system for both routine and non-routine journeys.

### *RESOURCES:*

Gainesville Area Regional Transit System Routes and Schedules

<http://www.go-rt.com/>

Space Coast Area Transit Bicycle Commuting Information

[http://www.ridescat.com/forms/bicycle\\_info\\_request.php](http://www.ridescat.com/forms/bicycle_info_request.php)

## **P - PUBLIC WORKS AND ENGINEERING**

### *Lead by Example*

#### **Credit 1: Minimize solid and hazardous waste through recycling and reuse.**

##### *ACTIVITY:*

- a) Develop a construction project waste management/recycling plan. (3 points)
- b) Operate a local government material/chemical reuse/redistribution center. (1 point)
- c) Operate a community tool lending library. (1 point)
- d) Maintain a green fleet program for department (2 points) or entire local government (4 points).
- e) Utilize integrated pest management. (1 point)

##### *APPROACH:*

Develop a construction project waste management/recycling plan to be implemented prior to undertaking any construction project (roads, buildings, etc.). Plan should call for environmental and economic evaluation of various recycling, reuse, and disposal alternatives for waste generated by project. Oversee a center whereby surplus equipment/material/chemicals are made available for reuse to local government staff, or the community. Oversee a community tool lending library. Spearhead efforts to maintain green fleets within the local government by incorporating at least 75% of the applicable best management practices outlined in chapters C-M of the Florida Green Local Government Standard Fleet Management and Vehicle Maintenance Module. Incorporate a system of integrated pest management for use at all local government buildings, landscapes, and facilities.

##### *SUGGESTED DOCUMENTATION:*

- a) Copy of plan implementation procedures.
- b-c) Provide location of center and/or library, and hours of operation.
- d) Provide details of green fleet program.
- e) Submit elements of IPM program.

##### *BENEFIT:*

Employing various recycling and reuse strategies reduced the amount of solid and hazardous waste that must be disposed of.

##### *RESOURCES:*

Build Your Own CDL Program

[http://www.ecy.wa.gov/programs/swfa/cdl/toolbox\\_howto.htm](http://www.ecy.wa.gov/programs/swfa/cdl/toolbox_howto.htm)

Sarasota County Recycled Paint

<http://www.co.sarasota.fl.us/EnvironmentalServices/SolidWaste/HazardousWaste/RecycledPaint.asp>

City of Berkeley, CA Tool Lending Library

[http://berkeleypubliclibrary.org/services\\_and\\_resources/tool\\_lending\\_library/](http://berkeleypubliclibrary.org/services_and_resources/tool_lending_library/)

Florida Green Local Government Standard Fleet Management and Vehicle Maintenance Module and Posters.

Sarasota County Integrated Pest Management

<http://sarasota.extension.ufl.edu/IPM/ipm.shtml>

# Florida Green Local Government Designation Reference Guide

## **Credit 2: Minimize green house gas emissions.**

### *ACTIVITY:*

- a) Operate local government alternative fueling station. (1 point)
- b) Earn waste reduction credit through the production of clean-burning fuels. (1 point)

### *APPROACH:*

If a local government fleet operates on alternative fuel, operate and maintain a refueling station. County governments get waste reduction credits for using yard clippings, clean wood waste, or paper waste as feedstocks for the production of clean-burning fuels such as ethanol.

### *SUGGESTED DOCUMENTATION:*

Submit location of station, and fuel type. Describe clean-burning fuel production feedstock and process.

### *BENEFIT:*

Alternative fuels conserve resources and minimize vehicular emissions to the atmosphere.

### *RESOURCES:*

Florida Green Local Government Standard Fleet Management and Vehicle Maintenance Module.  
Florida Statute 403.706

[http://www.flsenate.gov/Statutes/index.cfm?mode=View%20Statutes&SubMenu=1&App\\_mode=Display\\_Statute&Search\\_String=&URL=CH0403/Sec706.HTM](http://www.flsenate.gov/Statutes/index.cfm?mode=View%20Statutes&SubMenu=1&App_mode=Display_Statute&Search_String=&URL=CH0403/Sec706.HTM)

## **Credit 3: Minimize local government energy use.**

### *ACTIVITY:*

- a) Use LED traffic lights. (1 point)
- b) Utilize solar or other energy efficient streetlights (1 point) and/or solar pedestrian crosswalks. (1 point)
- c) Operate a Rebuild America program for the local government. (1 point)

### *APPROACH:*

Develop a plan for replacing conventional traffic and streetlights with energy efficient models.  
Organize a constituency to become a Department of Energy Rebuild America partnership.

### *SUGGESTED DOCUMENTATION:*

- a-b) Submit details of light replacement plan, or dates that lights were retrofitted to more efficient technology.
- d) Provide a list of partners in the program.

### *BENEFIT:*

Significant savings can be achieved by upgrading various light fixtures to more efficient models.  
Rebuild America partnerships work towards energy efficient improvements in the local government sector.

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## *RESOURCES:*

Florida Traffic Engineering Research Lab LED Traffic Signal Testing  
[http://potentia.eng.fsu.edu/terl/areas\\_of\\_work\\_led\\_traffic\\_signals.htm](http://potentia.eng.fsu.edu/terl/areas_of_work_led_traffic_signals.htm)

City of St. Cloud success with LED Traffic Lights  
<http://www.stcloud.org/index.asp?SID=445>

Rebuild Sarasota  
<http://rsc.co.sarasota.fl.us/>

## **Credit 4: Enhance storm water control and water conservation.**

### *ACTIVITY:*

- a) Street sweeping. (1 point applicable if not met)
- b) Routine maintenance plan for maintenance of storm sewers. (1 point applicable if not met)
- c) Employ green landscaping procedures for local government facilities. (1 point)

### *APPROACH:*

Assist local government to comply with requirements of National Pollutant Discharge Elimination System (NPDES) permit through street sweeping and storm sewer maintenance activities. Utilize the green landscaping practices as detailed for local governments to reduce the need for fertilizer.

### *SUGGESTED DOCUMENTATION:*

- a-b) Provide details of street sweeping and storm sewer maintenance schedule.
- c) Provide details of landscaping activities and landscape fertilization plan (include type of fertilizers used, method of application, and application schedule).

### *BENEFIT:*

The pollutant load that stormwater places on natural and artificial treatment systems can be reduced through various strategies.

## *RESOURCES:*

City of Tampa Street Sweeping Operations

[http://www.tampagov.net/appl\\_Stormwater\\_Street\\_Sweeping/mappage.asp?cscRedirectID=490](http://www.tampagov.net/appl_Stormwater_Street_Sweeping/mappage.asp?cscRedirectID=490)

City of Tampa Storm Sewer Maintenance

[http://www.tampagov.net/dept\\_stormwater/programs\\_and\\_services/storm\\_sewer\\_maintenance.asp](http://www.tampagov.net/dept_stormwater/programs_and_services/storm_sewer_maintenance.asp)

Florida Green Local Government Standard Environmental Landscaping Module

Wisconsin Department of Natural Resources Rain Gardens

<http://www.dnr.state.wi.us/runoff/rg>

## **Credit 5: Preserve/enhance street tree coverage.**

### *ACTIVITY:*

- a) Become a Tree City USA. (1 point)

### *APPROACH:*

Fulfill the requirements of this National Arbor Day Foundation program.

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## *SUGGESTED DOCUMENTATION:*

Submit official certification, or application for certification.

## *BENEFIT:*

Tree City USA often involves the entire community in the planting of trees for many environmental benefits including shade value and wildlife habitat.

## *RESOURCES:*

National Arbor Day Foundation Tree City USA Program  
<http://www.arborday.org/programs/treeCityUSA/index.cfm>

## ***Control***

### **Credit 6: Reward innovation.**

#### *ACTIVITY:*

- a) Develop a reward/incentive program for employee environmental innovation in public works. (1 point)

#### *APPROACH:*

Create a forum/mechanism by which employees can make suggestions to enhance the environmental performance of public works functions, along with an awards or incentive program.

#### *SUGGESTED DOCUMENTATION:*

Describe the operation of the forum/mechanism.

#### *BENEFIT:*

Often times, due to their constant field involvement, employees can generate interesting and innovative ideas geared towards environmental stewardship that decision makers may overlook.

## ***Education***

### **Credit 7: Staff education.**

#### *ACTIVITY:*

- a) Offer green fleet management training to all applicable departments. (1 point)
- b) Train and certify select staff as certified arborists. (1 point)

#### *APPROACH:*

Become schooled in the facets of green fleet management and provide outreach to other local government departments not currently utilizing a green fleet. Select staff to undertake necessary training to become a certified arborist by the International Society of Arboriculture.

#### *SUGGESTED DOCUMENTATION:*

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Submit materials that describe the type of training/outreach offered. Submit copies of individual certifications.

## *BENEFIT:*

Generally, public works has the necessary equipment, staff, and facilities to operate a green fleet program, and is best suited to extend the program to other departments. Certain public works staff should be trained in arboriculture such that tree planting, trimming, and preservation are carried out in an effective fashion.

## *RESOURCES:*

Florida Green Local Government Standard Fleet Management and Vehicle Maintenance Module and Posters

International Society of Arboriculture

<http://www.isa-arbor.com/home.asp>

## **Credit 8: Community Education**

### *ACTIVITY:*

a) Community stormwater education campaign. (1 point)

### *APPROACH:*

Place informative stickers or use stenciling on important aspects of stormwater management systems (outfall pipes, drains, impervious surface, etc.) throughout the city/county. Many can be obtained from the local water management district.

### *SUGGESTED DOCUMENTATION:*

Submit examples or photos of stickers or stencils.

### *BENEFIT:*

Stormwater conveyance marking may help educate the public about the path stormwater takes through the community, and may help them to respect, and not negatively impact the system.

### *RESOURCES:*

Indian River Lagoon Storm Drain Stenciling

[http://sjr.state.fl.us/programs/outreach/pubs/irl\\_update/01sum01.html#2](http://sjr.state.fl.us/programs/outreach/pubs/irl_update/01sum01.html#2)

## **Q - SCHOOL BOARD**

### *Lead by Example*

#### **Credit 1: Reduce green house gas.**

##### *ACTIVITY:*

- a) Utilize alternative fuel for school busses. (2 points)
- b) Monitor and track building energy usage in the school district (2 points)
- c) Maintain a Recycling program (1 point)

##### *APPROACH:*

School bus fleet operates on an alternative fuel such as CNG or biodiesel. Monitor and track building energy use in the school district as an indicator of performance. Make the data public to motivate conservation. Earn an additional point for enacting an extensive educational program on energy use or encouraging conservation through competitions. Create a recycling program for paper, aluminum, plastic and cardboard in the school district. Place bins at strategic locations and provide a collection program.

##### *SUGGESTED DOCUMENTATION:*

Submit details of fuel type used, source of fuel, refueling stations, and appropriate training of mechanics. Submit energy bill analysis for at least a two year period, indicating where information is available to public. Provide educational curriculum or details of competition. Provide photos or details of the program.

##### *BENEFIT:*

Alternative fuels generate significantly less gas and particulate emissions than diesel. Monitoring consumption sets a baseline on which to improve. Undertaking monitoring activities and analyzing results often unveils opportunities for conservation and to eliminate waste, yielding economic and environmental benefits. Implementing educational and competitive activities provides knowledge and motivation to other members in reduction efforts. Recycling removes material from the solid waste stream, reducing environmental and economic costs.

##### *RESOURCES:*

Florida Green Local Government Standard Fleet Management and Vehicle Maintenance Module  
Utility Report Cards

<http://www.utilityreportcards.com>

Building Performance Matters

<http://www.floridaenergycenter.org/en/education/k-12/curricula/index.htm>

FDEP Education Resources

<http://www.dep.state.fl.us/waste/categories/recycling/pages/educate.htm>

Broward County School Recycling Program

<http://www.broward.org/recycling/schoolsrecycling.htm>

#### **Credit 2: Preserve / enhance habitat**



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## *ACTIVITY:*

- a) School grounds certified by environmental program. (1-5 points)

## *APPROACH:*

Seek certification of individual school grounds by state or national programs such as those offered from Audubon International, Florida Yards & Neighborhoods, National Wildlife Federation, etc. Receive one point for each 20% of school grounds certified.

## *SUGGESTED DOCUMENTATION:*

Submit certification or application for certification materials.

## *BENEFIT:*

Organized programs provide well defined goals, strategies to achieve those goals, and offer an incentive to follow through with the entire program.

## *RESOURCES:*

Florida Yards & Neighborhoods Program

<http://fyn.ifas.ufl.edu/>

Audubon International Cooperative Sanctuary Program

<http://www.auduboninternational.org/programs/acss/index.htm>

National Wildlife Federation Schoolyard Habitats

<http://www.nwf.org/schoolyardhabitats/index.cfm>

Florida Green Local Government Standard Environmental Landscaping Module

## **Credit 3: Reduce solid waste**

## *ACTIVITY:*

- a) School system utilizes a pollution prevention / EPP program. (1 point)
- b) School equipment reuse program / swap shop. (1 point)
- c) Operate and maintain a green fleet program. (1 point)

## *APPROACH:*

Develop and implement a specialized pollution prevention and/or environmentally preferable purchasing program (EPP) for the school system. Create a specialized equipment reuse program for the school system. Practice green fleet management within the school system by incorporating at least 75% of the applicable best management practices outlined in chapters C-M of the Florida Green Local Government Standard Fleet Management and Vehicle Maintenance Module.

## *SUGGESTED DOCUMENTATION:*

- a) Submit guidelines by which the school system uses for purchase of equipment and supplies.
- b) Describe operation and location of reuse program/swap shop.
- c) Describe elements of the green fleet program that are used by the school vehicle system.

## *BENEFIT:*

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- a) By purchasing environmentally preferable supplies, indoor air quality can be enhanced, as well as product recycled content / recyclability.
- b) Reuse of school equipment can save the local government money while at the same time helping to achieve solid waste management goals.
- c) Green fleet programs provide enhanced risk management for the school system, by reducing generation of solid and hazardous waste.

### *RESOURCES:*

Pollution Prevention in Schools

<http://www.mercuryinschools.uwex.edu/act/p2.htm>

Palm Beach County Solid Waste Authority Business Equipment Reuse Center

[http://www.dep.state.fl.us/waste/quick\\_topics/publications/shw/recycling/InnovativeGrants/IGyear4/finalreport/PalmCountyBERCFinalReportMay2004.pdf](http://www.dep.state.fl.us/waste/quick_topics/publications/shw/recycling/InnovativeGrants/IGyear4/finalreport/PalmCountyBERCFinalReportMay2004.pdf)

Alachua County Computers for Schools Program

<http://www.pcsforschools.org/howhlp/howtodon.html>

Leon County School Transportation Department

<http://www.dep.state.fl.us/pollutionprevention>

Florida Green Local Government Standard Fleet Management and Vehicle Maintenance Module

### **Credit 4: Construct and maintain green buildings.**

#### *ACTIVITY:*

- a) Green operation and maintenance of buildings. (1 point)
- b) Construct / renovate green schools. (1-10 points)

#### *APPROACH:*

Incorporate the green cleaning and maintenance principles of the Creating Green and Profitable Work Environments Guide in the school system. Construct new schools or renovate existing schools to meet an existing green building standard. Score 1 point for each 10% of school buildings meeting an FGBC or USGBC green building standard.

#### *SUGGESTED DOCUMENTATION:*

- a) Submit a copy of the “baseline checklist” included in the guide to show which principles have been incorporated.
- b) Submit certifications received for school buildings.

#### *BENEFIT:*

There are many existing programs that can help guide school construction and maintenance that improve the life-cycle cost and environmental performance of the buildings.

#### *RESOURCES:*

Creating Green and Profitable Work Environments

<http://www.fsec.ucf.edu/en/consumer/buildings/commercial/pdf/M4-04.pdf>

Brevard County School System Custodial Standards

<http://ehs.brevard.k12.fl.us/PDF%20files/CUSTODIAL%20STANDARDS%2004-05.pdf>

Florida Green Building Coalition Commercial Building Standard

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<http://www.floridagreenbuilding.org/db/?q=node/5750>

USGBC LEED Standards

[http://www.usgbc.org/leed/leed\\_main.asp](http://www.usgbc.org/leed/leed_main.asp)

Creating Green and Profitable Work Environments

<http://www.fsec.ucf.edu/en/consumer/buildings/commercial/cleaning.htm>

## ***Control***

### **Credit 5: Green building becomes official policy.**

#### ***ACTIVITY:***

a) Mandates for green buildings / green cleaning and maintenance. (2-4 points)

#### ***APPROACH:***

School Board enacts requirements for construction of new schools (4 points) or renovation of existing schools (3 points) to green building standards or employing green cleaning and maintenance standards in all schools (2 points).

#### ***SUGGESTED DOCUMENTATION:***

Submit copies of official ordinance or mandate.

#### ***BENEFIT:***

By requiring such activity, environmental performance goals are ensured.

#### ***RESOURCES:***

Creating Green and Profitable Work Environments

<http://www.fsec.ucf.edu/en/consumer/buildings/commercial/cleaning.htm>

Florida Green Building Coalition Commercial Building Standard

<http://www.floridagreenbuilding.org/db/?q=node/5750>

USGBC LEED Standards

[http://www.usgbc.org/leed/leed\\_main.asp](http://www.usgbc.org/leed/leed_main.asp)

## ***Education***

### **Credit 6: Student education**

#### ***ACTIVITY:***

- a) Involve students in green projects within the school. (2 points)
- b) Involve students in green projects outside the school. (2 points)

#### ***APPROACH:***

Students are exposed to green building through lesson plans such as by taking part in the Alliance to Save Energy Green Schools program or curricula developed by the Florida Solar Energy Center. Students can also be exposed to green building outside of lesson plans through field trips to green local

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government features and involvement in projects that enable school grounds to be certified by state and national programs.

## *SUGGESTED DOCUMENTATION:*

Submit details of projects, either in-house, external, or both, which engage students in green building education.

## *BENEFIT:*

Green building education can fulfill part of the requirements for science curriculums.

## *RESOURCES:*

Alliance to Save Energy Green Schools Program

<http://www.ase.org/section/program/greenschl/>

Florida Solar Energy Center Education Resources

<http://www.floridaenergycenter.org/en/education/k-12/index.htm>

Alachua County Environmental Park Tours

<http://www.co.alachua.fl.us/assets/uploads/images/pw/pk-tour.pdf>

Utility Report Cards

<http://www.utilityreportcards.com>

Building Performance Matters

<http://www.floridaenergycenter.org/en/education/k-12/curricula/index.htm>

FDEP Education Resources

<http://www.dep.state.fl.us/waste/categories/recycling/pages/educate.htm>

Broward County School Recycling Program

<http://www.broward.org/recycling/schoolsrecycling.htm>

SunnySide Environmental School in Portland, Oregon

<http://www.environmentalschool.org/activities/activities.html>

## **Credit 7: Staff education.**

### *ACTIVITY:*

a) Incentives for environmental training of teachers over the summer. (2 points)

### *APPROACH:*

School Board offers incentives for teachers who choose environmentally based learning opportunities/projects during the summer season.

### *SUGGESTED DOCUMENTATION:*

Submit details of coursework offered to staff, and incentives for completing such coursework.

### *BENEFIT:*

Incentive based summer learning opportunities are an effective way to bring environmental curricula into the classroom.

### *RESOURCES:*

Alliance to Save Energy Green Schools Program

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<http://www.ase.org/section/program/greenschl/>

Florida Solar Energy Center Education Resources

<http://www.floridaenergycenter.org/en/education/k-12/curricula/index.htm>

## **R - SOLID WASTE**

### *Lead by Example*

#### **Credit 1: Reduce local government solid waste**

##### *ACTIVITY:*

- a) Become a partner in the EPA waste wise program. (1 point)
- b) City/County wide chemical/hazardous waste collection. (1 point)
- c) Operate public reuse store / swap shop. (1 point)
- d) C&D separation for recycling at landfill (wood pallets, metals, cardboard, carpet padding, brick, cement, etc.) (1 point)
- e) Offer recycled paint back to community. (1 point)
- f) Landfill gas recovery. (1 point)
- g) Develop a disaster waste management plan. (1 point)

##### *APPROACH:*

Become an official partner of the US EPA waste wise program. Conduct a community wide hazardous waste collection campaign, and provide curbside pickup at least twice a year for items such as paint, chemicals, mercury, antifreeze, batteries, electronic equipment etc. Drop-off for items such as spent rechargeable batteries may take place via bins where new product is sold. Operate a public reuse store / swap shop where community members can drop off /purchase reusable materials/equipment, or partner with a local Habitat for Humanity affiliate to maintain a Habitat ReStore. Institute separation of reusable items such as wood, pallets, metals, cardboard, carpet padding, brick, cement, etc. at C&D landfill either for recycling or for resale. Conduct in house or contracted paint collection and recycling and offer recycled paint back to the community. Institute landfill gas recovery at landfills and utilize for heat or power. Develop a disaster waste management plan that involves recovery of reusable materials.

##### *SUGGESTED DOCUMENTATION:*

- a) Submit copy of Waste Wise partner application.
- b) Provide flyer or website link about the program.
- c) Submit location and hours of operation for reuse store / swap shop.
- d) Describe types and amounts of items separated out of general waste stream at landfill.
- e) Provide example of material used to educate the public about the availability of recycled paint.
- f) Provide overview of landfill gas recovery system and end use of energy recovered.
- g) Describe waste management efforts and recovery plan in the event of a disaster.

##### *BENEFIT:*

Several opportunities exist to reduce the amount of material entering the landfill, thereby extending their useful life. A marketing campaign about hazardous waste and local collection programs increases participation rates and reduces the amount of hazardous waste improperly disposed of.

##### *RESOURCES:*

US EPA Waste Wise Program  
<http://www.epa.gov/wastewise/>

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Sarasota County Project Green Sweep

[www.co.sarasota.fl.us/EnvironmentalServices/SolidWaste/HazardousWaste/ProjectGreenSweep.asp](http://www.co.sarasota.fl.us/EnvironmentalServices/SolidWaste/HazardousWaste/ProjectGreenSweep.asp)

Alachua County Hazardous Waste Collection

<http://www.alachuacounty.us/government/depts/epd/pollution/householdwaste.aspx>

Habitat for Humanity ReStore Directory

[http://www.habitat.org/env/restore\\_detail.aspx?place=88](http://www.habitat.org/env/restore_detail.aspx?place=88)

Orange and Seminole Counties Drywall Recycling Pilot

<http://www.americanrecycler.com/02florida03.html>

Sarasota County Recycled Paint

<http://www.co.sarasota.fl.us/EnvironmentalServices/SolidWaste/HazardousWaste/RecycledPaint.asp>

US EPA Disaster Debris Document

<http://www.epa.gov/epaoswer/non-hw/muncpl/debris.htm>

The Rebuilding Center, Portland OR

<http://www.rebuildingcenter.org/>

State of Florida DEP Recycling Homepage:

<http://www.dep.state.fl.us/waste/categories/recycling/default.htm>

State of Florida DEP Electronics Scrap Management Homepage

<http://www.dep.state.fl.us/waste/categories/electronics/default.htm>

State of Florida DEP C&D Recycling Page

<http://www.dep.state.fl.us/waste/categories/recycling/pages/canddmain.htm>

State of Florida DEP Green Lodging Program

<http://www.dep.state.fl.us/greenlodging/>

## **Credit 2: Monitor and promote recycling.**

### *ACTIVITY:*

- a) Curbside recycling for homes. (1 point applicable if not met)
- b) Offer recycling collection services and an education program for businesses. (1 point)
- c) Offer recycling collection services and an education program to residents living in multi-family dwellings (apartments, condos, duplexes) (1 point per waste stream, 5 points maximum).
- d) Monitor types and amounts of material entering landfill. (1 point)

### *APPROACH:*

Divert materials from the waste stream through recycling collection efforts, targeting materials such as cardboard, paper, glass, plastic, steel and aluminum. Monitor participation rates for residential and commercial recycling and develop a strategy to increase participation. Monitor types and amounts of material entering landfill and develop programs to identify areas where minimization improvements are needed.

### *SUGGESTED DOCUMENTATION:*

- a) Submit recycling schedule and types of bins used / commodities recycled.
- b) Provide educational material and description of recycling program.
- c) Provide educational material and description of recycling program.
- d) Explain strategy for monitoring material entering landfill and include some data.

### *BENEFIT:*

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Curbside recycling may enhance recycling participation. By monitoring types and amounts of material entering landfill, it can be used as an indicator to help decide where to target solid waste reduction efforts.

## RESOURCES:

Polk County Municipal Solid Waste Reduction and Reuse Measurement Guide

[http://www.dep.state.fl.us/waste/quick\\_topics/publications/shw/recycling/InnovativeGrants/IGyear5/PolkCountyWasteReductionGrantFinal.pdf](http://www.dep.state.fl.us/waste/quick_topics/publications/shw/recycling/InnovativeGrants/IGyear5/PolkCountyWasteReductionGrantFinal.pdf)

State of Florida DEP C&D Recycling Page

<http://www.dep.state.fl.us/waste/categories/recycling/pages/canddmain.htm>

California Integrated Waste Management Board

<http://www.ciwmb.ca.gov/ConDemo/>

Alachua County Waste Collection

<http://www.alachuacounty.us/government/depts/epd/pollution/crnews.aspx>

State of Florida DEP Recycling

<http://www.dep.state.fl.us/waste/categories/recycling/default.htm>

State of Florida DEP Electronics Scrap Management Homepage

<http://www.dep.state.fl.us/waste/categories/electronics/default.htm>

Solid Waste Authority of Palm Beach County, School Recycling Program

[http://www.swa.org/site/recycling/school\\_recycling\\_education/school\\_recycling\\_and\\_education.htm](http://www.swa.org/site/recycling/school_recycling_education/school_recycling_and_education.htm)

City of Tallahassee, Commercial Recycling

<http://www.talgov.com/customer/qr.cfm>

City of Ft. Lauderdale, Multi-family Recycling

<http://ci.ftlaud.fl.us/recycle/athome.htm>

City of St. Petersburg, Drop-off Program

<http://www.stpete.org/recmap.htm>

## **Credit 3: Preserve / Enhance habitat.**

### *ACTIVITY:*

- a) Closed landfill management. (1 point)

### *APPROACH:*

Properly manage closed landfills such that the land can be used as a community amenity such as a park.

### *SUGGESTED DOCUMENTATION:*

Submit closed landfill management plan.

### *BENEFIT:*

Proper management of closed landfills allows for the land to be used as a community amenity.

### *RESOURCES:*

Landfill Closure: End Uses

[http://www.forester.net/msw\\_9909\\_landfil\\_closure.html](http://www.forester.net/msw_9909_landfil_closure.html)

## ***Control***



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## **Credit 4: Local business incentives / regulations**

### *ACTIVITY:*

- a) Incentives for local businesses who utilize EPP or other solid waste reduction strategy. (1 point)
- b) Mandatory recycling of typical recyclables for homes and businesses. (1 point)
- c) Mandatory recycling program for large volumes (wood, cardboard, metal, concrete, etc.) of construction and demolition (C&D) debris targeting building, contractors, and developers (2 points).
- d) Offer waste assessments to businesses (1 point).

### *APPROACH:*

Develop an incentive of at least \$200 per business for those that employ environmentally preferable purchasing (EPP) or other solid waste reduction strategy. Enact mandatory and enforced recycling of typical recyclables and C&D debris.

### *SUGGESTED DOCUMENTATION:*

- a) Submit details of incentive and any application materials.
- b) Submit language of ordinance or mandate.
- c) Submit language of ordinance or mandate.
- d) Provide promotional material with description of the program.

### *BENEFIT:*

Offering some kind of incentive may increase participation of local businesses in the communities EPP program, or could encourage them to develop one of their own. Enforcing a recycling mandate will help ensure that solid waste management goals are met.

### *RESOURCES:*

Hawaii Green Business Program

<http://hawaii.gov/dbedt/info/energy/resource/greenbusiness>

City of Gainesville, Mandatory Commercial Recycling

<http://www.cityofgainesville.org/recycles/>

## **Credit 5: Minimize solid waste generation.**

### *ACTIVITY:*

- a) Volume based or special rates for solid waste collection. (1 point)
- b) Offer mulched yard waste to community. (1 point)
- c) Require recycling at all local government buildings. (1 point)
- d) Develop a program of composting food waste. (1 point)
- e) Develop a program of yellow and/or brown grease recycling (1 point each)

### *APPROACH:*

Institute collection/disposal rates based on volume for all customers and/or elevated rates for special collections. Effectively market source of mulch from chipped yard waste to community. Utilize the food waste from cafeterias, grocery stores or restaurants for composting or grease recycling.

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## *SUGGESTED DOCUMENTATION:*

- a) Provide details of rate structure.
- b) List pick up locations for mulched yard waste.
- c) Provide appropriate ordinance or policy.
- d) Submit a website link or flyer about the program.
- e) Submit a website link or flyer about the program

## *BENEFIT:*

Volume based rates may inherently encourage waste minimization. Offering free mulch not only relieves the local government of a source of waste, but also promotes waterwise landscapes. Ensure that available mulch is generated from appropriate species/sources. Recycling reduces the amount of the solid waste stream and has salvageable value as a resource. Reducing improper grease disposal also relieves blockage problems it generates in sewage systems and treatment plants, which often leads to the use of harsh chemicals.

## *RESOURCES:*

Reason Public Policy Institute Variable Rates for Municipal Solid Waste

<http://www.reason.org/ps295polsum.pdf>

Wisconsin volume based fee collection guide

<http://www.p2pays.org/ref/21/20329.pdf>

Brevard County Yard Waste Collection and Mulching

<http://brevardcounty.us/swr/yardwaste.cfm>

## ***Education***

### **Credit 6: Community education.**

#### *ACTIVITY:*

- a) Promote the EPA's Environmental Preferable Purchasing (EPP) program, recycling and other waste reduction strategies to local businesses. (1 point)
- b) Develop education program for solid waste management. (1 point)
- c) Offer educational materials and technical assistance on recycling to schools, businesses and special events (arenas, stadiums, convention centers) to increase recycling program participation (2 points).

#### *APPROACH:*

Provide education and outreach on environmentally preferable purchasing (EPP) and other solid waste reduction approaches to the local community.

#### *SUGGESTED DOCUMENTATION:*

Submit details of courses or other components of education program.

#### *BENEFIT:*

One of the barriers to EPP and solid waste management for local businesses is a lack of knowledge of available products, waste reduction techniques, and their environmental and economic benefits. Sharing strategies and procedures on successful recycling programs including monitoring strategies help direct the program toward success and higher participation rates.

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## *RESOURCES:*

Alachua County Waste Watchers

<http://www.alachuacounty.us/government/depts/pw/waste/watchers/>

US EPA EPP Training Tool

<http://www.epa.gov/epp/pubs/eppupdates/update7.pdf>

## **Credit 7: Staff education.**

### *ACTIVITY:*

a) Conduct a customer waste survey. (1 point)

### *APPROACH:*

Conduct a voluntary study whereby customers are able to indicate problematic waste sources (such as junk mail) to be used to gauge development of waste reduction programs and outreach.

### *SUGGESTED DOCUMENTATION:*

Submit copy of survey/study instrument.

### *BENEFIT:*

Results from such a study can be used to tailor development of waste reduction programs and outreach such that they target the most problematic components of the waste stream.

## *RESOURCES:*

Polk County Municipal Solid Waste Reduction and Reuse Measurement Guide

[http://www.dep.state.fl.us/waste/quick\\_topics/publications/shw/recycling/InnovativeGrants/IGyear5/PolkCountyWasteReductionGrantFinal.pdf](http://www.dep.state.fl.us/waste/quick_topics/publications/shw/recycling/InnovativeGrants/IGyear5/PolkCountyWasteReductionGrantFinal.pdf)

University of Central Florida Report: Incentives for Recycling

[http://www.hinkleycenter.com/publications/shapek\\_90-6.pdf](http://www.hinkleycenter.com/publications/shapek_90-6.pdf)

## **S - WATER AND WASTEWATER**

### *Lead by Example*

#### **Credit 1: Plant operations aimed at environmental performance.**

##### *ACTIVITY:*

- a) Seek FLDEP plant operations excellence award. (2 points)
- b) Create a reclaimed water infrastructure. (2 points)
- c) Sanitary sewer overflow abatement. (2 points)

##### *APPROACH:*

Consideration for the Florida Department of Environmental Protection (FLDEP) award is based on maintenance, compliance, innovative treatment, waste reduction, pollution prevention, conservation, recycling, or other special achievement. Example approaches to employ are to recycle lime removed from drinking water, or create a reclaimed water infrastructure. Reduce sanitary sewer wet and dry weather overflows into surface waters as measured by EPA acceptable limits.

##### *SUGGESTED DOCUMENTATION:*

- a) Submit award certificate or completed award application.
- b) If a reclaimed water infrastructure does not exist, create one or submit results of comprehensive study to show it was deemed unfeasible.
- c) After performing a self-assessment, develop and supply a copy of the maintenance, operations, and management plan (MOM).

##### *BENEFIT:*

The FLDEP plant operations excellence award shows the community that the local government is committed to environmental stewardship. Reclaimed water provides a “sink” for treated wastewater other than surface discharge or underground injection, and conserves potable and shallow aquifer resources. An overflow abatement program will highlight any weak areas in a city’s sewer system, and help to mitigate/prevent dangerous overflows.

##### *RESOURCES:*

FL DEP Awards

<http://www.dep.state.fl.us/water/wastewater/dom/domaward.htm>

FL DEP Water Reuse Program

<http://www.dep.state.fl.us/water/reuse/index.htm>

City of Clearwater, FL Reclaimed Water Division

[http://www.clearwater-fl.com/gov/depts/pwa/public\\_utils/divisions/reclaimed/index.asp](http://www.clearwater-fl.com/gov/depts/pwa/public_utils/divisions/reclaimed/index.asp)

US EPA Sanitary Sewer Overflow

<http://www.epa.gov/ebtpages/watestormsanitaryseweroverflowssos.html>

#### **Credit 2: Reduce energy use.**

##### *ACTIVITY:*

- a) Conduct energy audit of treatment facilities. (1 point)

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b) Use cogeneration. (1 point)

## *APPROACH:*

Leverage a utility or other existing program to conduct an energy audit of water/wastewater treatment facilities to identify potential areas where energy efficiency can be enhanced. Develop a system for cogeneration, such as utilizing digester gas as a form of cogeneration and an end use for the heat/electricity generated.

## *SUGGESTED DOCUMENTATION:*

- a) Submit summary of audit results and recommendations that were generated.
- b) Describe the method of cogeneration and intended end use.

## *BENEFIT:*

There are many opportunities within water/wastewater treatment plants for energy conservation.

## *RESOURCES:*

US Department of Energy Rebuild America Program

<http://www.rebuild.gov>

Louisiana Department of Natural Resources Rural Water Energy Conservation

<http://www.dnr.state.la.us/SEC/EXECDIV/TECHASMT/programs/industrial/ruralwater.htm>

Iowa Association of Municipal Utilitites: How to save energy and money in your water and wastewater systems

<http://www.iamu.org/main/energy/water/waterreport.htm>

California Energy Commission: Process Energy

[http://www.energy.ca.gov/process/water/water\\_index.html](http://www.energy.ca.gov/process/water/water_index.html)

City of Santa Cruz, CA solar photovoltaic and electrical cogeneration upgrade project

<http://www.ci.santa-cruz.ca.us/pw/pdf/ProjectoftheYear2003.pdf>

## **Credit 3: Reduce solid and hazardous waste.**

### *ACTIVITY:*

- a) Use online bill pay or recycled paper for billing content. (1 point applicable if not met)

### *APPROACH:*

Return envelopes sent to customers should contain post consumer recycled content.

### *SUGGESTED DOCUMENTATION:*

- a) Submit billing content or website link.

### *BENEFIT:*

Goals for solid waste reduction can be set for every local government department, and many innovative strategies can be employed to achieve those goals

## ***Control***

## **Credit 4: Reduce water use.**

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## *ACTIVITY:*

- a) Utilize rate structures based on consumption. (1 point)
- b) Low flow fixture rebates. (1 point)
- c) Enforce watering restrictions during meter reads. (1 point)
- d) Require metering of shallow aquifer removal and sub-metering of multi-family housing. (1 point)
- e) Adopt policies to encourage alternative onsite wastewater and water reuse technologies and approaches. (1 point)
- f) Adopt Appendix C of the Florida Building Code related to gray water. (1 point)

## *APPROACH:*

Restructure residential and commercial water rates to promote conservation through the use of innovative programs such as inverted block rates. Offer low flow fixture rebates or replacement assistance for existing fixtures. Enforce all local and regional watering restrictions during routine meter reads or law enforcement patrols. Require additional metering and sub-metering and track as indicators of performance. Encourage gray water and rainwater harvesting through cisterns and/or rain barrels. Encourage the reuse of a/c condensate.

## *SUGGESTED DOCUMENTATION:*

Submit details of how rates are structures.

Provide information regarding rebate, including any advertising to make consumers aware.

Provide strategy of how restrictions will be enforced.

Describe metering plan and expected end use of information collected.

Submit copies of the appropriate ordinances or policies.

## *BENEFIT:*

Various strategies exist to promote water conservation – some incentive based, and some enforcement based. Choosing one, the other, or both may help achieve water conservation goals. Some, such as the shallow well metering program suggested, may simply educate water users on the amount of water used for certain purposes, such as irrigation. Water users should be educated to the fact that all sources of water are a scarce commodity in Florida, not just potable water.

## *RESOURCES:*

Florida Water Conservation Initiative Final Report: Water Pricing Chapter

[http://www.dep.state.fl.us/water/waterpolicy/docs/WCI\\_2002\\_Final\\_Report.pdf](http://www.dep.state.fl.us/water/waterpolicy/docs/WCI_2002_Final_Report.pdf)

Georgia issues in water pricing

[http://www.h2opolicycenter.org/pdf\\_documents/water\\_workingpapers/2004-011.pdf](http://www.h2opolicycenter.org/pdf_documents/water_workingpapers/2004-011.pdf)

City of Melbourne, FL plumbing retrofit programs

<http://www.melbournefl.org/watercon/plumbing.htm>

## *Education*

### **Credit 5: Community education.**

## *ACTIVITY:*

- a) Utilize informative billing. (1 point)

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- b) Distribute printed material or create internet content detailing water wastewater source, quality, treatment process. (1 point)
- c) Create an education campaign for water use reduction (Florida friendly landscaping, rainwater, etc.). (2 points)
- d) Maintain an on-call water quality program. (1 point)
- e) Become part of groundwater guardian program. (1 point)
- f) Offer home and business audits. (1 point)
- g) Enable customers to track and analyze their usage via the internet. (1 point)

### *APPROACH:*

Develop informative billing that educates customers about current and past usage. Develop and post an “environmental report” on a website or in printed form that details the process of water/wastewater treatment including raw materials consumed, processing specifics, water quality and emissions information. For one point, team with an extension service on a demand side water conservation educational program, earn an additional point if these materials are freely available online. Maintain an on-call program that answers questions and conducts field investigations in response to citizen concern of water pollution incidents. Become a partner in the national groundwater guardian program. Acquire staff capability to conduct home and business water audits to identify areas of potential conservation opportunities, such as mobile irrigation labs. Develop an online system whereby customers can access account history and evaluate performance based on other users with similar characteristics. Offer suggestions for users to reduce usage.

### *SUGGESTED DOCUMENTATION:*

- a) Submit copy of sample bill.
- b) Provide copies of educational material, or website link.
- c) Provide details of education campaign including descriptions of any courses offered.
- d) Provide operational overview of on-call program.
- e) Submit certificate of participation or completed program application.
- f) Describe audit services made available.
- g) Provide website whereby customers can gain access to usage information.

### *BENEFIT:*

Many strategies exist to educate the public on the importance of water conservation, and education, combined with outreach and tools can help the local government achieve their water conservation goals.

### *RESOURCES:*

City of Melbourne, FL Water Quality Report

<http://www.melbournefl.org/pub/pub-pdf/waterquality.pdf>

Groundwater Guardian Program

<http://www.groundwater.org/gg/learnmore.html>

Sarasota County Environmental Education: Water Resources

<http://www.sarasota.wateratlas.usf.edu/education/>

Palm Beach Soil and Water Conservation District Mobil Irrigation Lab

<http://www.pbswcd.org/mblirrlab.htm>

Sarasota County H2O2GO Program

<https://h2o2go.scgov.net/Index.jsp>