MiniCities and MegaCities:

Incorporating Sustainability into Comprehensive Planning

Ralf Brookes Attorney

Board Certified in City County and Local Government Law
Ralf@RalfBrookesAttorney.com
Phone (239) 910-5464
Practicing Public Interest Local Government law throughout Florida
Please visit our website - www.RalfBrookesAttorney.com

Models and Examples

These rather large documents are available at my website page
"Model Document Downloads" as PDFs or Links:

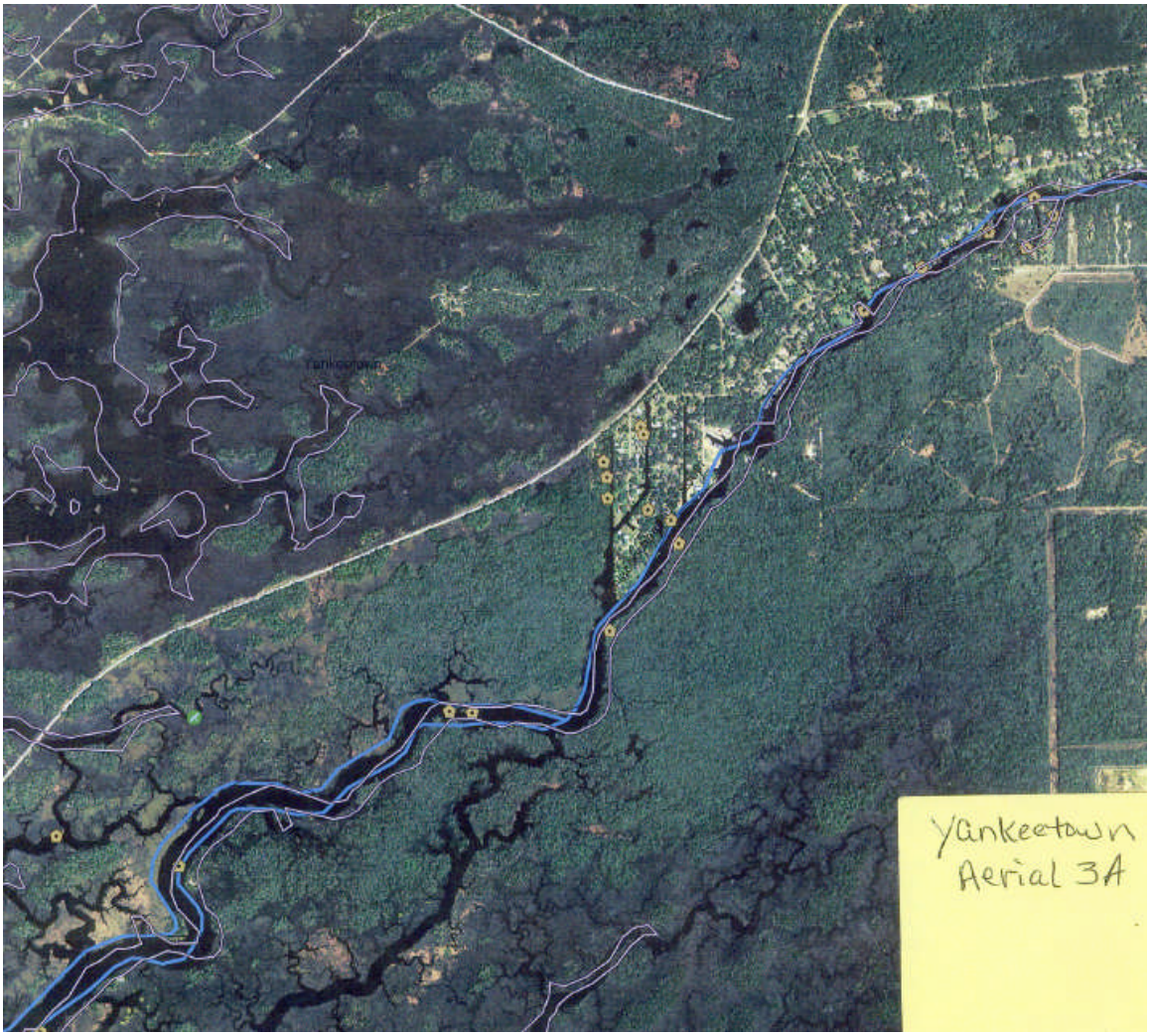
http://ralfbrookesattorney.com/**modeldocumentdownloads**.html

Model Unified Land Development Code for Florida Small Coastal Muncipalities

Town of Yankeetown Comprehensive Plan Rewritten Amendment 2008-01
(underline and strikethrough)

Monroe County 2010 Comprehensive Plan
Goals, Objectives & Policies
http://www.monroecounty-fl.gov/pages/MonroeCoFL_Growth/CompPlan2010/2010CompPlanSec3.pdf

Town of Yankeetown, Florida



Main Street Yankeetown
Riverside Drive

Yankeetown
(population 801)

Vision

Yankeetown “is located in a rural area with outstanding natural resources which form the basis of its retirement and outdoor recreation based economy. The Town is nestled along the Withlacoochee River beneath a tree canopy including mature live oak and cypress draped in picturesque Spanish moss. The Town’s original plan and layout reflects many of the positive attributes of traditional neighborhood development including a platted grid pattern of canopy covered neighborhood streets, divided boulevard type streets, and alleys all under the extensive tree canopy. Unique within Florida, the Town is reminiscent of a small southern town draped in a Spanish moss covered tree canopy along a scenic natural winding river which serves as a birthing area for manatees, foraging area of dolphin and from the night sky can be heard the sounds of owls rather than traffic. The Town’s beauty draws visitors and residents who seek out the scenic natural beauty of the Town and its walkable pedestrian and bicycle oriented layout as well as its abundant wildlife, birds, marshlands, coastal hammocks and natural resources. The Town is truly scenic, picturesque and worthy of special considerations to preserve the Town’s unique sense of place and beauty that is truly unique and remarkable. There is no other place quite like Yankeetown, in the entire state of Florida.”

CPA 2008-01

POLICY 1.1.1.3 In addition to complying with Outstanding Florida Water (OFW) standards, all new subdivisions, planned unit developments, and commercial development in all land use districts shall utilize "low impact" development practices appropriate for such use including:

- **(a) Landscaped biofiltration swales;**
- **(b) Use native plants adapted to soil, water and rainfall conditions;**
- **(c) Minimize use of fertilizers and pesticides;**
- **(d) Grease traps for restaurants;**
- **(e) Recycle storm water by using pond water for irrigation of landscaping;**
- **(f) Dry wells to capture runoff from roofs;**
- **(g) Porous pavements;**
- **(h) Maintain ponds to avoid exotic species invasions;**
- **(i) Aerate tree root systems (for example, WANE systems);**
- **(j) Vegetate floodplain areas with native and/or Florida-friendly plants to provide habitat and wildlife corridors;**
- **(k) Rain barrels and green roofs where feasible; and**
- **(l) Use connected Best Management Practices (BMPs), (treatment trains flowing from one BMP into the next BMP) to increase nutrient removal.**

Existing development shall be encouraged, but not required to use the above recommendations and shall not be considered nonconforming if they do not.

POLICY 1.1.2.8
Commercial Water-Dependent land use district:

1.1.2.8.1 Purpose and Intent. The principal purpose of this district is to provide for water-dependent land uses that facilitate, provide, and protect commercial fishing and recreational fishing and public access to the waterfront. Water dependent use means an activity that can only be conducted on, in, over, or adjacent to the water, and that involves, as an integral part of such activity, direct access to and use of coastal waters. Water dependent uses can take the form of a commercial business or a public facility. The following Commercial Water Dependent uses are allowed: marinas, commercial fishing, commercial fishing related uses, recreational fishing, fish houses for packing, smoking and sales of fish, marine scientific and biological uses, charter boat docks and related sales of recreational boating trips, boat rentals, canoe and kayak outposts.

1.1.2.8.2 Only low to medium commercial intensity uses are allowed. Impervious surface ratios shall not exceed 50% of the parcel. All development shall utilize "low impact" development practices. Intensity refers to the measurement of nonresidential uses. Intensity means an objective measurement of the extent to which land may be developed or used, including the consumption or use of the land; the measurement of the use of or demand on natural resources; and the measurement of the use of or demand on facilities and services, including the floor area ratio, trip generation and level of service.

1.1.2.8.3 No single structure on a parcel shall exceed a gross floor space of 3,000 square feet. The total combined floor area of all buildings on a parcel shall not exceed a floor area ratio of .07 for any parcel equal to or greater than 20760 square feet. For parcels less than 20760 square feet see Table 1-1B

	BEBR	BEBR	Schimberg
Year	%	Population	Population
2005	1.90%	743	744
2006	1.90%	757	
2007	1.90%	771	
2008	1.90%	786	
2009	1.90%	800	
2010	1.90%	815	801
2011	1.90%	830	
2012	1.90%	846	
2013	1-90%	862	
2014	1.90%	878	
2015	1.90%	895	857
2016	1.90%	912	
2017	1.90%	929	
2018	1.90%	945	
2019	1.90%	963	
2020	1.90%	981	911

Population Based Housing Need

B. Yankeetown shall require that all new or replacement sanitary sewage systems in all land use districts ~~the CHHA~~ meet the following requirements:

a) All new or replacement sanitary sewage systems shall be designed and constructed to minimize or eliminate infiltration of floodwaters into the system and discharge from the system into floodwaters. Joints between sewer drain components shall be sealed with caulking, plastic or rubber gaskets. Backflow preventers are required.

b) All new or replacement sanitary sewage systems shall be located and constructed to minimize or eliminate damage to them and contamination from them during flooding.

(c) The DCA has objected and recommended, and Yankeetown has concurred that all new and replacement septic systems are to be performance-based certified to provide secondary treatment equivalent to 10 milligrams per liter maximum Nitrogen.

POLICY 4.1.2.8

Development within Yankeetown shall continue to be constrained by the vast amount of development that has already occurred within the 100-year floodplain and the Coastal High Hazard Area. No publicly or privately funded, central collection sanitary WWTFs shall be constructed within the Coastal High Hazard Area of the Town. Yankeetown shall continue to pursue a regional sanitary wastewater treatment system that can be developed in conjunction with the neighboring town of Inglis and Levy County, and constructed outside the Coastal High Hazard Area east of US Highway 19.

EPA United States Environmental Protection Agency

Riparian Buffer Width, Vegetative Cover, and Nitrogen Removal Effectiveness:

A Review of Current Science and Regulations

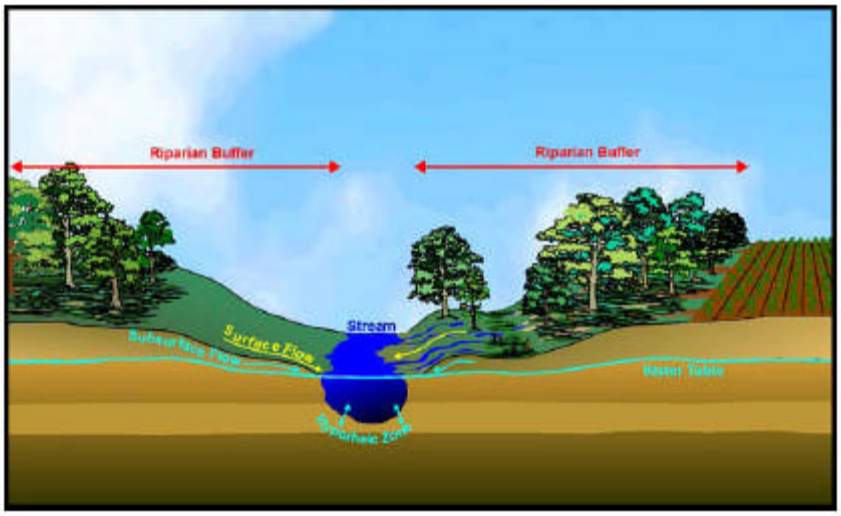


Table 2. Mean and Percent Effectiveness of Riparian Buffers at Removing Nitrogen. Buffer Widths Necessary to Achieve a Given Percent Effectiveness (50%, 75%, 90%) are Approximate Values Predicted by the Non-Linear Model, y=a*ln(x)+b. Effectiveness was not predicted (np) for Models with R^2 Values <0.2

Flow Path or Vegetative cover type	N	Mean nitrogen removal effectiveness (%)	1SE	Relationship to buffer width		Approximate buffer width (m) by predicted effectiveness		
				Model	R^2	50%	75%	90%
All studies	66	74.2	4.0	y = 10.5*ln(x) + 40.5	0.137	3	28	112
Surface flow	18	33.3	7.7	y = 20.2*ln(x) – 21.3	0.292	34	118	247
Subsurface flow	48	89.6	1.8	y = 1.4*ln(x) + 84.9	0.016	np	np	np
Forest	22	90.0	2.5	y = -0.7*ln(x) + 92.5	0.003	np	np	np
Forested Wetland	7	85.0	5.2	y = -7.3*ln(x) + 104.3	0.203	np	np	np
Grass	22	53.3	8.7	y = 23.0*ln(x) – 13.6	0.277	16	47	90
Grass/forest	8	80.5	10.2	y = 18.1*ln(x) + 20.4	0.407	5	20	47
Wetland	7	72.3	11.9	y = 3.0*ln(x) + 68.9	0.005	np	np	np

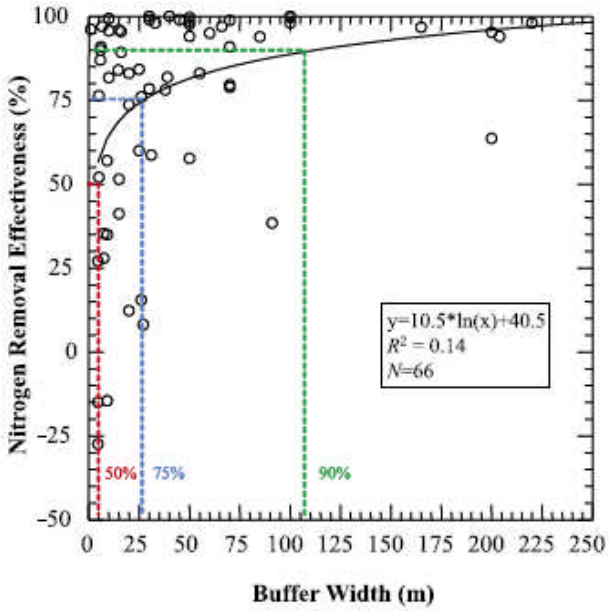


Figure 1. *Relationship of nitrogen removal effectiveness to riparian buffer width. All studies combined. Lines indicate probable 50%, 75%, and 90% nitrogen removal efficiencies based on the fitted non-linear model.*

POLICY 4.2.2.2
The land development regulations, adopted by the statutory deadline, shall require:

~~A~~4.2.2.2.1 Minimum design and construction standards for new subdivisions, planned unit developments, and commercial development that will ensure that post-development runoff rates do not exceed predevelopment runoff rates and encourage low impact development practices including:

(a) Landscaped biofiltration swales;
(b) Use native plants adapted to soil, water and rainfall conditions;
(c) Minimize use of fertilizers and pesticides;
(d) Grease traps for restaurants;
(e) Recycle storm water by using pond water for irrigation of landscaping;
(f) Dry wells to capture runoff from roofs;
(g) Porous pavements;
(h) Maintain ponds to avoid exotic species invasions;
(i) Aerate tree root systems (for example, WANE systems);
(j) Vegetate ~~onsite~~ floodplain areas with native and/or Florida-friendly plants to provide habitat and wildlife corridors;
(k) Rain barrels and green roofs where feasible; and
(l) Use connected Best Management Practices (BMPs), (treatment trains flowing from one BMP into the next BMP) to increase nutrient removal.

Existing development shall be encouraged, but not required to use the above recommendations and shall not be considered non conforming if they do not use the above practices.

3

CHAPTER 3

SITE DESIGN STANDARDS

3.01.05 Limitations on Armoring of Shorelines

Coastal armoring shall conform to the Florida Department of Environmental Protection's coastal armoring regulations and in addition shall comply with the following criteria:

1. All coastal armoring permits will be reviewed by Town for consistency with the Section 3.08 of this ordinance: Dark Sky Requirements, Lighting, and Sea Turtle Protection.
2. All new and restored dune systems shall be maintained in perpetuity by the property owner. Additional permits from DEP may be required.
3. Seawalls are prohibited. To avoid the use of structures that sever natural connections between riparian, intertidal and subaqueous areas soft living shoreline protection strategies shall be used. Designs to create a living shoreline include vegetation management, beach nourishment and dune restoration, tidal marsh enhancement and creation, bank grading to reduce the impact of erosion, marsh toe revetments and sills, beach sills, permeable offshore breakwater systems, and artificial reefs.
4. Each living shoreline protection strategy shall be constructed with habitat compatible materials, as determined by DEP, and shall be required in lieu of reconstruction or replacement of any existing coastal armoring.

3.05.05 Florida Yards and Neighborhoods Requirements

A. *Irrigation*. Installed in-ground irrigation systems are prohibited. All landscapes shall be designed to exist predominantly on rainfall once plants are established.

B. *Fertilization*. No synthetic fertilizer shall be used on the landscape. Non-synthetic fertilizer may only be used in accordance with the Florida Yards & Neighborhoods Handbook.

C. *Pesticides*. Only biological and biorational pesticides (such as horticultural oils and insecticidal soaps) may be used on the landscape. Products that contain both herbicides and fertilizer together are prohibited and shall not be used on the landscape.

D. *Soil*. To provide healthy soils able to support minimal input landscapes, existing soils and vegetation shall be preserved to the greatest extent practical and compaction of soils shall be minimized during construction. Any compaction of landscape areas occurring during construction activities shall be mitigated before planting by tillage, aeration, and/or application of organic soil amendments.

E. All landscaping materials, including trees, shrubs, and ground cover shall be consistent with the "Right Plant, Right Place" principles in accordance with the Florida Yards & Neighborhoods Handbook.

F. All new construction landscape shall meet the requirements for certification as a Florida-friendly Yard.

G. Before a Certificate of Occupancy may be issued, the property owner or their representative shall submit documentation that the landscape for the property is certified as a Florida-friendly Yard.

H. Upon sale or transfer of title to property certified as a Florida-friendly Yard, the new property owner shall obtain recognition of the landscape at the Golden Oak recognition level within one (1) year of the date of sale or transfer of title.

3.06.00 STORMWATER MANAGEMENT REQUIREMENTS

A. The applicant shall demonstrate compliance with the rules of the St Johns River Water Management District governing the discharge of stormwater from the site.

B. Additionally, the applicant shall demonstrate that the post-development load for total nitrogen and total phosphorus discharged from the project area will not exceed the undeveloped natural load for total nitrogen and total phosphorus discharged from the project area.

C. If compliance with this requirement cannot be met through compliance with the rules of the SJRWMD, then the applicant shall provide additional stormwater treatment.

D. In providing any additional stormwater treatment necessary, the applicant shall utilize low impact development practices and technologies, including but not limited to rain gardens, green roofs, exfiltration systems, bioretention swales, cisterns, and pervious pavement, which may be interconnected in treatment trains flowing from one low impact development practice or technology into the next to increase nutrient removal efficiencies.

E. If low impact development practices and technologies are inadequate or infeasible, the applicant may meet this requirement by increasing capacity in the centralized stormwater treatment system.

3.08.00 DARK SKY REQUIREMENTS, LIGHTING, AND SEA TURTLE PROTECTION

3.08.01 Purpose and Intent

The purpose of these outdoor lighting regulations is to protect sea turtles and coastal marine life from harms associated with excessive outdoor lighting. In addition, these regulations are intended to protect people and property values within the Town from the nuisance and harm of excessive outdoor lighting that may hinder or decrease night time visibility, create a hazardous glare that may affect automobile and vehicle drivers ability to optimally operate their vehicle in a safe manner, create blinding brightness that leaves unsafely dark shadowed areas, or create an artificial atmospheric glow that prevents residents of the Town from enjoying the night sky above their homes.
….

3.09.00 GREEN BUILDING REQUIREMENTS

3.09.01 Purpose and Intent

The Town is committed to minimizing the short term and long term negative impacts construction has on the environment. The intent of this section is enhance the public welfare by incorporating green building measures into the design, construction, and maintenance of buildings in order to provide owners and occupants of residential homes, commercial buildings, offices, industrial buildings, and mixed use developments with energy and water savings, good indoor air quality, and healthy, pleasant, and productive surroundings. A further intent of this section is to benefit the community by having buildings constructed that are resource-efficient and conserve energy.

3.09.02 Findings

The Town finds that:

A. Green building practices recognize the relationship between natural and built environments. Green building design, siting, construction, and operation can have a significant positive effect on energy and resource efficiency, reduction of waste and pollution generation, and the health and productivity of a building's occupants over the life of the building. This is a critical component of sustainable development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

B. Green building benefits are spread throughout the systems and features of the building. Green buildings may use recycled content building materials, consume less energy and water, have better indoor air quality, and use less wood fiber than conventional buildings. Construction waste is often recycled and remanufactured into other building products, resulting in reduced landfill impacts.

C. Design, siting, and construction decisions made by the Town in the construction and remodeling of Town buildings can result in significant energy cost savings to the Town over the life of the buildings.

D. Green building design, siting, construction, and operational techniques have become increasingly widespread in commercial and residential building construction. National and regional systems have been established to serve as guides and objective standards for green building practices. The U.S. Green Building Council has established the Leadership in Energy and Environmental Design (LEED) rating systems for construction projects.

3.09.03 LEED Requirements for New Construction

All new construction projects within the Town shall achieve a minimum of LEED certified status under the appropriate version of LEED unless exempted under the procedures established by this section. New construction projects shall strive for LEED platinum certification under the appropriate version of LEED.

A. Applicable Version of LEED.

1. A construction project of any size consisting of a new commercial building, office building, industrial building, or mixed used building that combines residential use with commercial or industrial use shall proceed for LEED certification under the version of LEEDNC presently adopted by the Town.
2. A construction project consisting of a multifamily residential building with four (4) or more stories shall proceed for LEED certification under the version of LEEDNC presently adopted by the Town.
3. A construction project that consists of a single family home, single family homes, or a multifamily residential building less than four stories shall proceed for LEED certification under the version of LEEDHOMES presently adopted by the Town.

B. LEED Checklist.

1. Every applicant who files a building permit application for construction of a new building shall provide to the Town Administrator:
a. a completed LEED checklist demonstrating which credits the project will complete; and
b. the registration of the proposed project with the United States Green Building Council.
2. The Town shall not issue either a land development permit or a building permit unless the LEED checklist demonstrates that the proposed building will achieve enough points to attain at a minimum LEED certified status.
3. The Town will not issue a permanent certificate of occupancy unless and until the applicant produces verifiable documentation from USGBC affirming that the project is at minimum LEED certified. However, upon completion of construction, satisfactory inspection by the Town building inspector or his designee and confirmation that all documentation has been submitted for required certification, the Town building inspector or his designee may issue a temporary certificate of occupancy. Upon issuance of a temporary certificate of occupancy, the applicant shall pay a fee to ensure successful completion of the certification as set forth below. If the developer achieves certification status, the fee paid shall be refunded to the applicant. The fee is defined in the table below:

Table 3.09.03 Fee Schedule

Refundable Certification Fee	Less than 50,000 square feet	More than 50,000 square feet
	$0.26/square feet	$17,500.00

C. Green Building Certification.

1. Compliance and enforcement.

The building inspector or his designee shall determine whether the requirements listed on the LEED checklist are implemented at each stage of construction, including at the foundation inspection, framing inspection, and prior to issuance of a final certificate of occupancy. The building inspector or his designee may conduct other inspections, as needed, to ensure compliance with this chapter. The building inspector or his designee shall review the information submitted by the applicant and determine whether the applicant will achieve the required certification as set forth herein. If the building inspector or his designee finds that the applicant is not reasonably expected to achieve LEED certification, the building inspector or his designee shall make the following findings:

a. If the covered project has not met the requirements for certification as set forth herein, whether the applicant has made a good faith effort to comply with the ordinance;

b. If the applicant has not made a good faith effort to comply, or if the applicant fails to submit the documentation within the time period as set forth in the regulations, or fails to submit such documentation within a reasonable time period as determined by the building inspector or his designee, whether the final building permit approval or certificate of occupancy should be withheld;

c. If the applicant has not complied with this section, whether the applicant should be required to undertake further actions to mitigate this noncompliance.

3.09.04 Infeasibility Exemption

The building inspector or his designee may issue an exemption from any of the requirements of this section upon finding that circumstances exist that make it a hardship or infeasible for the applicant to meet those requirements. The burden shall be on the applicant to show circumstances to establish infeasibility. These circumstances may include, but are not limited to:

A. The availability of markets for materials to be recycled;

B. The availability of green building materials and technologies; and

C. The compatibility of green building requirements with existing building standards.

3.09.05 Appeals.

Any applicant may appeal to the Town council the determination of noncompliance

9.05.00 SUSTAINABILITY WARRANTS

9.05.01 Purpose and Intent

The purpose of this subsection is to provide standards and procedures for the granting of a Sustainability Warrant by the Town Council upon a finding that use of an alternative performance standard that deviates from standards and criteria set forth the ULDC is preferable because it furthers, promotes and is in harmony with the purpose and intent of the ULDC, and offers more protection of environmental and natural resources of the Town and the ability of the ecosystem to maintain ecological processes and functions, biodiversity and ecological productivity into the future.

9.05.02 Pre-application Conference

The applicant shall meet with the Town Administrator to discuss informally the requirements of this sub-section and the nature of the proposed Sustainability Warrant prior to submitting an application for a Sustainability Warrant. The Town Administrator may specifically waive the pre-application conference requirement.

9.05.03 Submittal of the Application

A. The applicant shall submit to the Town Administrator an application for a Sustainability Warrant on a form provided by the Town Administrator. The Town Administrator shall not accept an incomplete application. The Town Administrator shall establish and strictly adhere to application deadline.
B. The applicant shall submit the following information along with the application for a Sustainability Warrant to the Town Administrator:
    1. Documents, reports, or other materials published by a generally recognized professional organization or government agency that describe the requested performance standard and support the Sustainability Warrant Application;
    2. If title to the property is not in the applicant's name and the property owner does not sign the application, the applicant shall submit a document signifying the owner's consent or an affidavit by the applicant;
    3. Any documents, plans, or other materials the Zoning Official determines are necessary to supplement the Sustainability Warrant Application.

9.05.04 Review by the Town Council

The Town Council shall approve the Sustainability Warrant Application by super-majority vote based on the application, the requirements of this Part, and the recommendations of the staff.

9.05.05 Effect of Sustainability Warrant Approval

MONROE COUNTY COMPREHENSIVE PLAN

GOAL 101

Monroe County shall manage future growth to enhance the quality of life, ensure the safety of County residents and visitors, and protect valuable natural resources. [9J-5.006(3)a]

Objective 101.2

Monroe County shall reduce hurricane evacuation clearance times to 24 hours by the year 2010.

Policy 101.2.1

Monroe County shall establish a Permit Allocation System for new residential development. The Permit Allocation System shall limit the number of permits issued for new residential development.

Policy 101.2.3

The Permit Allocation System for new residential (ROGO) development shall specify procedures for:

1. annual adjustment of the number of permits for new residential units to be issued during the next year based upon, but not limited to the following:
    a. expired allocations and building permits in previous year;
    b. allocations available, but not allocated in previous year;
    c. number of allocations borrowed from future quarters;
    d. vested allocations;
    e. modifications required or provided by this plan or agreement pursuant to Chapter 380, Florida Statutes; and
    f. receipt or transfer of affordable housing allocations by intergovernmental agreement.

2. allocation of affordable and market rate housing units in accordance with Policy 101.2.4; and

3. timing of the acceptance of applications, evaluation of applications, and issuance of permits for new residential development during the calendar year.

GOAL 105
Monroe County shall undertake a comprehensive land acquisition program and smart growth initiatives in conjunction with its Livable CommuniKeys Program in a manner that recognizes the finite capacity for new development in the Florida Keys by providing economic and housing opportunities for residents without compromising the biodiversity of the natural environment and the continued ability of the natural and manmade systems to sustain livable communities in the Florida Keys for future generations.

Objective 105.1
Monroe County shall implement smart growth initiatives in conjunction with its Livable CommuniKeys and Land Acquisition Programs which promote innovative and flexible
development processes to preserve the natural environment, maintain and enhance the community character and quality of life, redevelop blighted commercial and residential areas, remove barriers to design concepts, reduce sprawl, and direct future growth to appropriate infill areas.

Policy 105.1.1
Monroe County shall create an economic development framework for a sustainable visitor-based economy, not dependent on growth in the absolute numbers of tourists, that respects the unique character and outdoor recreational opportunities available in the Florida Keys.