

DRAFT

ORDINANCE NO 2008-_____

AN ORDINANCE AMENDING CHAPTER 5 OF THE WALTON COUNTY LAND DEVELOPMENT CODE TO ESTABLISH A WILDLIFE CONSERVATION ZONE WITH LIGHTING STANDARDS IN WALTON COUNTY; PROVIDING FOR A PURPOSE AND APPLICABILITY; PROVIDING FOR DEFINITIONS; PROVIDING STANDARDS FOR NEW CONSTRUCTION ACTIVITIES; PROVIDING STANDARDS FOR EXISTING EXTERIOR LIGHTING; PROVIDING FOR ENFORCEMENT AND PENALTIES; PROVIDING FOR INTERPRETATION, SEVERABILITY, AND AN EFFECTIVE DATE.

WHEREAS, Walton County, Florida, has a coastal community with an extensive shoreline on the Gulf of Mexico; and

WHEREAS, Walton County's extensive shoreline provides important nesting habitat for several species of sea turtles; and

WHEREAS, Walton County's shoreline is developed or may be developed with lighted structures on the shoreline in close proximity to sea turtle nesting areas; and

WHEREAS, structures which are built on or near the shoreline usually include some source of artificial lighting; and

WHEREAS, scientific studies conclude that certain types of artificial lighting have a detrimental effect on nesting sea turtles and their hatchlings by inhibiting nesting and interfering with the natural lighting cues used by hatchlings to properly orient to the open waters of the Gulf of Mexico; and

WHEREAS, proper light management may also positively affect other species of wildlife that utilize Walton County's coastal areas, and

WHEREAS, Walton County recognizes and respects the rights of citizens to use their property to the full extent and for their personal enjoyment; and

WHEREAS, it is the goal of the Walton County Board of County Commissioners (the "Board") to promote effective management of exterior and interior lighting to provide both safe and secure nighttime use of private property by property owners and minimize disturbances to nesting sea turtles, their hatchlings, and other coastal wildlife; and

DRAFT

WHEREAS, the Board desires to implement this lighting ordinance with the intention of reducing the detrimental affects of artificial lighting on sea turtles and other coastal wildlife;

NOW THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF WALTON COUNTY, THAT THE WALTON COUNTY LAND DEVELOPMENT CODE BE AMENDED AS FOLLOWS:

Section 1. PURPOSE, INTENT, AND APPLICABILITY

- (1) The purpose and intent of this ordinance is to reduce the impacts of artificial lighting on threatened and endangered sea turtles and other coastal wildlife along the Gulf of Mexico beaches in Walton County.

Section 2. DEFINITIONS; The glossary of the Walton County Land Development Code is hereby amended to add the following definitions (insertions are underlined, deletions have ~~strikethrough~~):

Artificial light or artificial lighting: The light emanating from a manmade point source of light (see Point source of light, below).

Beach: Dynamic coastal area of sedimentary deposits, usually sand, between the frontal dune and the water.

Bug light: A lamp that is tinted yellow in order to attenuate its emission of short wavelength visible light and thus reduce its attractiveness to insects. This does not include insect killing devices (bug zappers) that attract insects.

Candela: The basic, international unit for measuring luminous intensity.

Coastal Construction Control Line: The line established pursuant to the provisions of Section 161.053, Florida Statutes.

Directly illuminated: Illuminated by one or more point sources of light directly visible to an observer on the beach.

Disorientation: Inability of hatchling or adult sea turtles to orient properly to the Gulf of Mexico.

Frontal dune: The first natural or human-made mound of sand which is located immediately landward of the beach.

Full cut-off fixture: A fixture with a flat, horizontally oriented lens and opaque sides that does not permit light distribution above a horizontal plane located at the bottom of the fixture.

DRAFT

Hatchling: Any individual of a species of sea turtle, within or outside of a nest, which has recently hatched from an egg.

High Intensity Discharge (HID) Lamps: A general term for mercury, metal halide and high-pressure sodium lamps. HID lamps contain compact arc tubes which enclose mercury and various gases with other chemicals and operate at relatively high pressure and temperatures to produce intensely bright light.

Indirectly illuminated: Illuminated by one or more point sources of light not directly visible to an observer on the beach.

Lamp: The source of light within the luminaire.

LED : Light Emitting Diodes.

Light fixture: The device that holds, protects, and provides the optical system and power connections for a source of light.

Light trespass: Artificial light that directly or indirectly illuminates any portion of the beach or dune system seaward of the crest of the primary dune.

Long wavelength: Light with wavelengths predominantly greater than 580 nanometers (nm) that fall within the yellow to red color spectrum, including low pressure sodium vapor lamps, incandescent bug lamps, Lights of America 11 watt compact fluorescent bug lamps, TSL coated compact fluorescent lamps, amber and red LEDs, true red neon lamps, and other lamps certified by the Florida Fish and Wildlife Commission as “Wildlife Lighting”.

Low-pressure sodium light: An electric discharge lamp containing sodium, neon, and argon and that appears amber-yellow when lighted.

Lumen: A unit of light output or flux, equal to the amount of light flow from one candela through a unit solid angle.

Luminaire: A complete unit that artificially produces and distributes light. An artificial light source, including fixture, ballast, mounting, and lamp(s).

Nest: An area where sea turtle eggs have been naturally deposited or subsequently relocated by an authorized permittee of the Florida Fish and Wildlife Conservation Commission.

Nesting Habitat: The beach, frontal dune, and those portions of the primary dune, typically seaward of the dune crest, accessible to sea turtles.

Nesting season: The period from May 1 through October 31 of each year.

DRAFT

Point source of light: A bulb, lamp, filament or other manmade source within a fixture that emanates light, including, but not limited to incandescent, tungsten-iodine (quartz), mercury vapor, fluorescent, metal halide, neon, halogen, high pressure sodium, and low pressure sodium light sources, as well as natural gas lights, torches, camp and bonfires. When a lamp is contained within a translucent fixture, the entire fixture shall be considered the point source of light.

Pole lighting: A light fixture set on a base or pole which raises the source of light higher than forty-eight (48) inches off the ground.

Primary dune: A significant dune which has sufficient vegetation, height, and alongshore continuity to offer protective value to upland properties. The primary dune may be separated from the frontal dune by an interdunal trough; however the primary dune may be considered the frontal dune if located immediately landward of the beach.

Recessed Ceiling Fixture – Fixture recessed into the ceiling such that no portion of the lamp extends below the horizontal plane of the ceiling.

Redevelopment – See definition (2) under “Development” in Walton County’s Land Development Code.

Sea turtle: Any marine-dwelling reptile of the families Cheloniidae or Dermochelyidae found in Florida waters or using the beach as nesting habitat, including the species: *Caretta caretta* (loggerhead), *Chelonia mydas* (green), *Dermochelys coriacea* (leatherback), *Eretmochelys imbricata* (hawksbill), and *Lepidochelys kempii* (Kemp’s ridley). For purpose of this rule, sea turtle is synonymous with marine turtle.

Shield: An opaque covering, canopy or other such device fitted over a light source that blocks the light source from being observed from the beach and prevents the light from illuminating the beach.

Substantial Improvement – See definition in Walton County’s Land Development Code.

Tinted glass: Any tinted glass treated to achieve an industry-approved, inside-to-outside light transmittance value of 45% or less. Such transmittance is limited to the visible spectrum (400 to 700 nanometers) and is measured as the percentage of light that is transmitted through the glass.

Translucent Fixture: A fixture consisting of a material (e.g., frosted glass) that transmits light but causes sufficient diffusion to prevent a distinct image of the lamp inside.

TSL (“Turtle Safe Lighting”): compact fluorescent bulbs/lamps that have been specifically coated to filter out short wavelengths of light and emit light in the yellow to red color spectrum.

DRAFT

Up-lighting: Lighting fixtures that are directed upward, usually onto objects (flags, monuments, signs, buildings, landscape, etc.).

Wildlife Conservation Zone: The area extending from the mean high water line to a line 750 feet landward of the Mean High Water Line along the Gulf of Mexico from the Okaloosa County line to the Bay County line. A map of the Conservation Zone is available electronically at www.co.walton.fl.us (Your Government, Maps, Turtle Lighting). If any portion of a lighted structure lies within the Conservation Zone, the entire structure shall be considered to be within the Conservation Zone.

Wildlife Lighting: Artificial lighting that minimizes the potential for negative affects to the nocturnal behaviors of nesting and hatchling sea turtles and other wildlife. Based on the premise of Keep it Low, Keep it Shielded, and Keep it Long, the following criteria apply:

- A. The light source is mounted as low to the ground or floor as practicable through the use of fixtures such as, low-mounted wall fixtures, low bollards, and ground-level fixtures;
- B. The lumens emitted by the light source are the minimal required for the intended application;
- C. The light source is contained within a full cut-off or fully shielded fixture such that no light is broadcast above a horizontal plane and the point source of light and any reflective surfaces of the fixture are not directly visible from the beach; and
- D. The lamp emits long-wavelength light.

The luminaires, light fixtures, lamps, and other light sources that have been certified as meeting the criteria of Wildlife Lighting can be found on the joint Florida Fish and Wildlife Conservation Commission and the U.S. Fish and Wildlife Service Wildlife Lighting Certification Program (LCP) website URL:

(<http://myfwc.com/seaturtle/WildlifeLighting/index.htm>).

Window tinting: Tinting or film that meets the standards for tinted glass.

Section 3. Section 5.10.00 is hereby created as part of the Walton County Land Development Code (insertions are underlined, deletion have ~~strikethrough~~):

5.10.00 General Standards

All exterior artificial light sources used to illuminate buildings, grounds, structures, pools, fountains, landscape, roadways, signs, and other site amenities within the Wildlife Conservation Zone, including construction, security, and walkway lighting shall comply with the following standards:

DRAFT

- (1) The point source of light or any reflective surface of the light fixture shall not be directly visible to an observer on the beach: and
- (2) The light shall not directly or indirectly illuminate any portion of the beach or dune system seaward of the crest of the primary dune.

Lights mandated by Federal regulations (e.g., Federal Aviation Administration) for illuminating obstructions in navigable airspace and lights required by the U.S. Coast Guard for boat navigation are exempt from the provisions of this section provided such lights have been reviewed and approved in accordance with requirements of the Federal Endangered Species Act. Also exempted are traffic signals and traditional holiday lights used outside the sea turtle nesting season.

5.10.01 Standards for new construction activities

In order to provide the highest level of protection for nesting sea turtles and their hatchlings, and other coastal wildlife, the following standards shall apply to exterior artificial light sources on all new coastal construction (including redevelopment and substantial improvements) within the Wildlife Conservation Zone for which a building permit was issued on or after the date of adoption of this ordinance:

- (1) All exterior light sources shall be compliant with the general standards set forth in Section 5.10.00 of this ordinance.
- (2) Only Wildlife Lighting, as defined in this Ordinance, shall be used for all exterior applications, with the exception that long-wavelength lamps are only required in fixtures within line-of-sight of the beach.
- (3) Up-lighting by high intensity discharge lamps is prohibited. Up-lighting by sources other than HID lamps is permitted if the illuminated object is not visible from the beach.
- (4) All exterior ceiling mounted fixtures, including recessed ceiling lights and light kits on ceiling fans, are prohibited for applications within line-of-sight of the beach. Recessed and full cut-off ceiling fixtures are permitted elsewhere within the Wildlife Conservation Zone.
- (5) Lighting that does not conform to the definition of Wildlife Lighting (e.g., not fully shielded) may be used for interior open-air courtyards provided the light fixture is positioned under an eave, overhang, or other type of structure such that light is not permitted to escape directly skyward and uses an incandescent lamp 25 watts or less, a compact fluorescent lamp 11 watts or less, or a long wavelength light source.
- (6) Pole-mounted lights shall only be used for those applications where mounting the lights at lower elevations cannot practicably achieve the foot candles

DRAFT

required to comply with the minimum light levels set forth in applicable State and/or Federal laws, rules and regulations designed to protect public health, safety or welfare. If required, pole-mounted lights shall be the minimum height necessary for their intended application and shall comply in all respects with the general standards set forth in Section 5.10.00. Pole-mounted lights shall not be used for pathway lighting.

- (7) Lighting of dune walkovers and elevated crossovers to the beach is prohibited.
- (8) Temporary lighting of construction sites, if not otherwise prohibited under FAC 62B-33.0015(1)(m), shall be restricted to the minimal number of lights necessary to conform to State and/or Federal safety regulations (e.g., OSHA). These lights shall comply with all of the general standards listed in Section 5.10.00.
- (9) Interior stairwells, elevators and enclosed parking garages that allow light to escape through windows or other openings within line-of-sight of the beach shall comply with all of the general standards listed in Section 5.10.00 of this Ordinance.
- (10) Signs shall be sited on the landward side of structures, when possible. Signs that must be placed on the seaward side of structures shall be positioned, when possible, such that they are not in line-of-sight of the beach and shall be mounted perpendicular to the beach. All signs shall be externally illuminated from above (downward) with full cut-off luminaires. If placement of signs within line-of-site of the beach is unavoidable, long-wavelength lighting, such as amber or red LED lamps, shall be required.
- (11) Tinted glass shall be installed on all windows and glass doors.
- (12) Roadway lighting within line-of-sight of the beach shall use low-pressure sodium lights (LPS) 55 watts or less and full cut-off fixtures mounted no higher than 20 feet above the ground. Additional shielding shall be installed if the light sources can be observed from the beach. High-intensity lighting applications not within line-of-sight of the beach shall use either full cut-off LPS 55 watts or less or full cut-off high pressure sodium (HPS) lights 150 watts or less mounted no higher than 25 feet above the ground.
- (13) Utility leased lighting including “yard” or security lights, shall comply in all respects with the standards imposed for roadway lighting in 5.10.01(12) above.
- (14) Outdoor light fixtures producing light directly by the combustion of fossil fuels (such as kerosene lanterns, gas lamps, etc.) shall be allowed provided

DRAFT

such fixtures are not within line-of-sight of the beach, are top shielded, are not open torches, not mantle based, and use only a single gas jet.

- (15) Before granting any building permit, the Walton County Building Department shall determine that all proposed construction complies in all respects with the standards imposed in this section. Detailed project lighting plans shall be submitted to the County showing the location of all exterior light sources relative to adjacent nesting habitat. The plans must identify the location, number and type of lighting to be used for all fixtures. Each building permit shall include a condition that the exterior lighting actually installed under such plans must comply with the standards imposed in this section before a Certificate of Occupancy may be issued. Applicants providing evidence that proposed lighting has been approved by the Florida Department of Environmental Protection as part of a permit for construction seaward of the CCCL shall be exempt from this provision. However, this exemption shall only apply to those lights reviewed under the CCCL program. All exterior lights landward of the CCCL within the Wildlife Conservation Zone must be reviewed and approved by the County as set forth herein.
- (16) Lights installed in conformance with approved lighting plans, as specified in 5.10.01(15), shall be considered compliant with all provisions of this ordinance.
- (17) Should the light fixtures practically permitted by this section fail to provide sufficient light to comply with the minimum light levels required by applicable State and/or Federal laws, rules or regulations designed to protect public health, safety and welfare, the developer, owner or owners' association may apply for variances from the standards set forth in this section, in accordance with Section 5.10.07, below.

5.10.02 Standards for existing lighting

In order to provide the highest level of protection for nesting sea turtles, their hatchlings, and other wildlife, all existing exterior artificial light sources, including utility leased lighting, within the Wildlife Conservation Zone shall be brought into compliance with the provisions of this ordinance as follows:

- (1) All exterior light sources shall be compliant with the general standards set forth in Section 5.10.00 of this ordinance.
- (2) All exterior signs within line-of-sight of the beach shall be externally illuminated from above (downward) with full cut-off luminaires.
- (3) Up-lighting by high intensity discharge lamps is prohibited. Up-lighting by sources other than HID lamps is permitted if the illuminated object is not visible from the beach.

DRAFT

- (4) Documented disorientation of nesting or hatchling sea turtles caused by interior lighting may be a violation of the U.S. Endangered Species Act and/or the Florida Marine Turtle Protection Act. Consequently, voluntary application of one or more of the following measures, as applicable, are encouraged to reduce or eliminate the negative effects of interior light emanating from doors and windows within line-of-sight of the beach:
 - A. Install tinted glass or apply window tinting;
 - B. Rearrange lamps and other moveable light fixtures away from windows;
 - C. Use opaque window treatments (shades, curtains, blinds, etc.) at night to shield interior lights from the beach;
 - D. Turn off unnecessary lights.
- (5) Lighting of dune walkovers and elevated crossovers to the beach is prohibited.
- (6) Roadway lighting within line-of-sight of the beach shall use low-pressure sodium lights (LPS) 55 watts or less and full cut-off fixtures mounted no higher than 20 feet above the ground. Additional shielding shall be installed if the light sources can be observed from the beach. High-intensity lighting applications not within line-of-sight of the beach shall use either full cut-off LPS 55 watts or less or full cut-off high pressure sodium (HPS) lights 150 watts or less mounted no higher than 25 feet above the ground.
- (7) All existing artificial light sources must comply with the standards set forth in Section 5.10.02 by May 1, 2010:
- (8) Fixtures which cannot be brought into compliance with the standards set forth in this section shall be removed or disabled. However, if the removal or disabling of such fixtures will cause a property to become out of compliance with the minimum light levels required by applicable State and/or Federal laws, rules or regulations designed to protect public health, safety and welfare, the developer, owner or owners' association may apply for variances from the standards set forth in this section, in accordance with Section 5.10.07, below.

5.10.03 Special Events

Special events requiring temporary lighting on or near the beach are allowed if the event organizer obtains a Special Event Permit from the Florida Department of Environmental Protection and conducts the activity in accordance with all permit conditions.

DRAFT

5.10.04 Conflicts With CCCL Lighting Requirements

Construction seaward of the CCCL requires submittal and approval of exterior lighting plans by the Florida Department of Environmental Protection. In those cases where the provisions of this ordinance conflict with CCCL lighting regulations, the more stringent shall apply.

5.10.05 Public Notice

Property owners that remit Tourist Development Council Bed Taxes within the Wildlife Conservation Zone must post standardized signs at conspicuous locations within common areas of their property and provide printed information notifying renters of this ordinance and its provisions. These materials will be developed by Walton County and provided at cost to affected property owners.

5.10.06 Enforcement and Penalties.

- (1) Property owners who do not bring exterior artificial light sources on their properties into compliance with the standards of this ordinance within the times specified in Section 5.10.02(7) hereof, or who themselves or through their tenants commit acts prohibited herein shall be guilty of a violation of this ordinance.
- (2) Enforcement procedures and penalties under this ordinance shall be those set forth in Sections 162.06 through 162.13, Florida Statutes, as may be amended from time to time.
- (3) Fines imposed for violations shall not exceed the amounts set forth in Section 162.09(2)(a), Florida Statutes.
- (4) The intent of Walton County is to enforce only the terms of this ordinance and not any state or federal laws.

5.10.07 Conflicts of Laws & Variances

Various state and federal laws, statutes, codes, rules and regulations designed to protect the health, safety and welfare of the public, require minimum light levels be maintained at certain buildings and facilities. These minimum light level requirements may conflict directly with the lighting standards set forth in Sections 5.10.01 and 5.10.02, above. Because obtaining a waiver of the State and Federal requirements may be difficult, if not impossible, a developer, property owner, owners' association or similar entity may apply to Walton County for variances from the County's lighting standards. Variance applications shall be made as follows:

DRAFT

- (1) Applications shall be submitted to the Walton County Planning and Development Division (Planning), in writing. Each shall contain a brief explanation of: (a) the conflict of laws; and (b) the practical reasons the applicant cannot comply with Walton County's standards. Each shall also contain an alternative lighting plan that will utilize the best available lighting technology and light management practices to minimize light trespass seaward of the crest of the primary dune. The alternative lighting plan shall bring lighting on a property as close as reasonably possible to the County's standards. The applicant shall agree to retrofit any and all fixtures for which a variance is granted with newer wildlife lighting technologies, within a reasonable time after being notified by the County that newer technologies are available.
- (2) Planning shall: (a) review each application; (b) make such inspections and inquiries as are necessary; (c) request additional data or meet with the applicant to clarify whether the alternative lighting plan will use only the minimum lighting necessary to meet State and Federal health, safety and welfare requirements and the best available technology to minimize light trespass; and (d) consult with the Office of the County Attorney, as appropriate.
- (3) After review by the appropriate departments, including an assessment of the impact of the requested variance on environmental and conservation programs within the County, the County Environmental Manager shall make the final administrative determination to approve the variance application, approve it with conditions, or deny it.
- (4) An applicant may appeal the Environmental Manager's administrative decision to the Walton County Board of Adjustments, in accordance with the Board of Adjustment provisions of the Walton County Land Development Code. Third parties may not. On appeal, the Board may consider whether or not the conflicts of laws, with the threat of potential fines or tort liability, constitutes the "unique circumstances" and "unnecessary hardship" elements of a variance.
- (5) The Environmental Manager shall maintain files of all variances that may be granted, and shall notify applicants, by certified mail, when new technologies become available that will help bring a property further into compliance with the County's standards. An applicant shall retrofit fixtures with the new technologies within a reasonable time after such notice.

Section 4. INTERPRETATION

The provisions of this ordinance shall be construed in order to effectively carry out its purpose. Where any provisions of this ordinance refers to or incorporates another provision, ordinance, statute, rule, regulation, policy, official publication, or other authority, it refers to the most current version, incorporating any amendments thereto or rescinded station thereof.

Section 5. REPEALER CLAUSE.

All ordinances or parts of ordinances that are not consistent or that conflict with the provisions of this ordinance are hereby repealed; provided that such repeal shall be only to the extent of such inconsistency and in all other respects this ordinance shall be cumulative of other ordinances regulating and governing the subject matter covered by this ordinance.

Section 6. SEVERABILITY.

Should any word, phrase, sentence, or section of this ordinance be held by a court of competent jurisdiction to be illegal, void, unenforceable, or unconstitutional then such shall be severed from this ordinance and the remainder of the ordinance shall remain in full force and effect.

Section 7. EFFECTIVE DATE.

This ordinance shall take effect as provided by law.

ADOPTED in an advertised public hearing of the Board of County
Commissioners this ____ day of _____, 2008.

WALTON COUNTY BOARD OF
COUNTY COMMISSIONERS

Sara Comander, Chair

ATTEST:

Martha Ingle, Clerk