

ORDINANCE NO 2018-_____

AN ORDINANCE AMENDING CHAPTER 5 OF THE OKALOOSA COUNTY CODE OF ORDINANCES TO ESTABLISH A SEA TURTLE CONSERVATION ZONE WITH LIGHTING STANDARDS IN UNINCORPORATED OKALOOSA COUNTY; PROVIDING FOR A PURPOSE, INTENT, APPLICABILITY AND EXEMPTIONS; PROVIDING FOR DEFINITIONS; PROVIDING GENERAL LIGHTING STANDARDS; PROVIDING LIGHTING STANDARDS FOR NEW CONSTRUCTION ACTIVITIES; PROVIDING STANDARDS FOR EXISTING LIGHTING; PROVIDING FOR THE PROHIBITION OF ACTIVITIES DISRUPTIVE TO SEA TURTLES; PROVIDING FOR ENFORCEMENT AND PENALTIES; PROVIDING FOR INTERPRETATION; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, Okaloosa County, Florida, occupies an ecologically diverse area and has, among the many native plant and animal communities represented, beach, dune, and coastal communities along its extensive Gulf of Mexico shoreline; and

WHEREAS, Okaloosa County's extensive shoreline that provides important nesting habitat for several species of marine (aka "sea") turtles; and

WHEREAS, located on the property of Okaloosa County are several public structures that are either operated by the County or pursuant to a lease with the County; and

WHEREAS, the County recognizes the need to avoid adversely impacting the interest of the rights of these lessees and still provide protection to the habitats and nesting of the sea turtles; and

WHEREAS, there are existing developed areas within the unincorporated area that are in close proximity to sea turtle nesting areas and it is anticipated that there will be future development in these 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 will also positively affect other species of wildlife that utilize Okaloosa County's coastal areas, and

WHEREAS, Okaloosa County recognizes and respects the rights of citizens to use their property to the full extent and for their personal enjoyment and seeks to balance those rights with the adverse impact of lighting on sea turtles and their hatchlings; and

WHEREAS, exterior and interior lighting can be managed to provide both safe and secure nighttime use of private property by property owners and minimize disturbances to sea turtles and their hatchlings on adjacent nesting beaches; and

WHEREAS, the Okaloosa County Board of County Commissioners (the "Board") desires to implement this lighting ordinance with the intention that the detrimental effects of artificial lighting on sea turtles will be relieved.

NOW THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF OKALOOSA COUNTY, THAT:

Section 1. There is hereby created Article IV of Chapter 5 of the Okaloosa County Code of Ordinances as follows:

Article IV Sea Turtle Conservation

Sec. 5-90 Purpose, Intent, Applicability, and Exemptions

- a) The purpose of this ordinance is to protect threatened and endangered sea turtles along the Gulf of Mexico beaches in Okaloosa County.
- b) This ordinance is intended to protect nesting sea turtles and sea turtle hatchlings from the adverse effects of artificial lighting, provide overall improvement in nesting habitat degraded by artificial light, and to increase successful nesting activity and production of hatchlings on the County's beaches.
- c) The provisions of this section shall apply to the unincorporated areas of Okaloosa County as specified herein.

- d) 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.

Sec. 5-91 Definitions Unless specifically defined herein, all words or phrases used in this article shall be ascribed the meaning which they have in common usage.

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

Beach: The zone of unconsolidated material that is contiguous with the waters of the Gulf of Mexico and extends landward from the mean low water line to the place where there is marked change in material or physiographic form, or to the line of permanent vegetation (usually the effective limit of storm waves).

Bug light: Any bulb/lamp 480 lumens or less that is specifically designed so as not to attract insects to the light, which is ordinarily yellow in color. 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.

County Code: The codification of the ordinances of Okaloosa County, Florida.

Cumulatively illuminated: Illuminated by numerous artificial light sources that as a group illuminate any portion of the beach or dune system seaward of the crest of the primary dune.

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

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

Dune A natural or man-made mound or ridge of loose sediments, usually sand-sized sediments, lying landward of the beach.

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.

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

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

Lamp: The source of light within the luminaire.

LED : Light Emitting Diodes.

Light fixture: The device that holds the point source of light.

Long wavelength: Light with wavelengths greater than 580 nanometers.

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

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 accessible to sea turtles.

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

Point source of light: A manmade source emanating 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.

Redevelopment – The demolition or removal of the principal structure or more than 60 percent of the impervious surface of a site.

Sea turtle or marine 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 kempi* (Kemp's ridley). For purpose of this rule, sea turtle is synonymous with marine turtle.

Sea Turtle Conservation Zone:

- a) south of U.S. 98 (Miracle Strip Parkway) in unincorporated Okaloosa County east of its intersection with Santa Rosa Boulevard to the westernmost boundary of the Gulf Islands National Seashore/ Unit; and
- b) south of Santa Rosa Boulevard from its intersection with US 98 west to the easternmost boundary of the Gulf Islands National Seashore/ Unit

Shield: An opaque, non-reflective 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.

Skyglow: An increase in light levels in the sky above natural ambient levels.

Substantial Improvement – For purposes of this ordinance, a substantial improvement is any change to 50% or more of the area of a structure within the Sea Turtle Conservation Zone and which includes the addition of any new outdoor lighting fixtures or replacement of existing outdoor lighting fixtures as part of the improvement.

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.

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

Wildlife Lighting: Artificial lighting that minimizes the potential for negative affects to the nocturnal behaviors of nesting and hatchling sea turtles and other wildlife the following criteria apply:

- a) The light source is mounted as low to the ground or floor as possible 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;
- d) Lamps emit only long-wavelength light (greater than 560 nanometers). These long-wavelength light sources include low pressure sodium vapor lamps 8000 lumens or less, bug lamps and some color-filtered compact fluorescent lamps 480 lumens or less, amber and red LEDs (light emitting diodes), and true red neon.
- e) 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.

Sec. 5-92 General Standards All exterior lighting within the sea turtle conservation zone, shall comply with the following standards:

- a) The point source of light or any reflective surface of the light fixture shall not be directly visible to an observer standing on the beach:

- b) The light shall not directly or indirectly illuminate any portion of the beach or dune system seaward of the crest of the primary dune; and
- c) The light shall not cumulatively illuminate any portion of the beach or dune system seaward of the crest of the primary dune.

Sec. 5-93 Application of Standards for Existing Structures and New Construction Activities In order to provide the highest level of protection for nesting sea turtles, their hatchlings, and other wildlife, and to balance the rights of property owners and leaseholders, the following standards shall apply to artificial light sources.

a) County Owned Structures located on County Property.

- 1) All County owned structures located on County property within the Sea Turtle Conservation Zone constructed following the effective date of this Ordinance shall comply with the provisions of this Ordinance and shall utilize Wildlife Lighting on the structure.
- 2) All existing structures located on County property and are owned, operated and maintained by the County shall replace all existing lighting with Wildlife Lighting. Such replacement shall be accomplished within four (4) years of the effective date of this Ordinance.
- 3) For County owned structures located on County property within the Sea Turtle Conservation Zone which are subject to a current lease, the Lessee shall submit a transmittal plan to the County Administrator as to the retrofitting of existing lighting. Such Plan shall be submitted within one hundred and eighty days (180) of the effective date of this Ordinance. Such plan shall allow the retrofit of the lighting over a period of no more than six (6) years and under such terms as deemed reasonable. No extension or renewal of any lease shall be permitted without compliance with the retrofitting of the lighting.

b) New Construction within the Sea Turtle Conservation Zone. All new construction (including redevelopment and substantial improvements as defined herein) within the Sea Turtle Conservation Zone for which a building permit is issued on or after the effective date of this Ordinance):

- 1) Unless otherwise exempted herein, only Wildlife Lighting, as defined in this section, 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.
- 2) Up-lighting is prohibited, because it contributes to skyglow, which can be disruptive to nesting and hatchling sea turtles.
- 3) All exterior ceiling mounted fixtures, including recessed fixtures, are prohibited, including light kits on ceiling fans.
- 4) Pole-mounted lights shall only be used for those applications where mounting the lights at lower elevations cannot practicably achieve the required foot candles to conform to state and/or federal regulations (e.g., parking and pool deck areas). Where used, these fixtures and lamps may not be mounted at a height greater than 25 feet above the ground and shall not be visible from the beach. Pole-mounted lights shall not be used for pathway or access area lighting.
- 5) Lighting of dune walkovers and elevated crossovers to the beach is prohibited under Florida Administrative Code (Chapter 62B-34, General Activities Seaward of the Coastal Construction Control Line).
- 6) Temporary lighting of construction sites, if not otherwise prohibited under FAC 62B-33, shall be restricted to the minimal number of lights necessary to conform to state and/or federal safety regulations (e.g., OSHA). These lights are exempt from Section 3.10.04.b) of this ordinance but shall comply with all of the general standards listed in Section 3.10.03 and shall be mounted no more than 8 feet above the ground.
- 7) Exterior lights used expressly for safety or security purposes shall comply with all of the standards in this section.
- 8) Open-air parking area lighting shall comply with all of the standards in this section.
- 9) Stairwells, elevator shafts, and enclosed parking garages that allow light to escape through windows or other openings within line-of-sight of the beach shall use lighting that complies with all of the standards of this section.

- 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-sight 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 of single or multi-story structures within line-of-sight of the beach.
 - 12) Utility leased lighting including parking, area, “yard” or security lights, shall comply in all respects with the standards imposed for roadway lighting in 3.10.05.b), below.
 - 13) Outdoor light fixtures producing light directly by the combustion of fossil fuels (such as kerosene lanterns, gas lamps, etc.) shall be allowed provided such fixtures are not within line-of-sight of the beach, are top shielded, and are not open torches.
- c) Before granting any building permit, the Okaloosa County Growth Management Department shall determine that all proposed construction complies in all respects with the standards provided 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. A letter from the FWC showing approval of the project lighting plan may be submitted in lieu of the lighting plan if such approval is a requirement for site development.

Sec. 5-94 Standards for Existing Lighting In order to provide the highest level of protection for nesting sea turtles, their hatchlings, and other wildlife, all existing artificial light sources, including utility leased lighting, within the Sea Turtle Conservation Zone shall be brought into compliance with the provisions of this section within four (4) years of the effective date of this Ordinance, as follows:

- a) Lighting of dune walkovers and elevated crossovers to the beach is prohibited under Florida Administrative Code (Chapter 62B-34, General Activities Seaward of the Coastal Construction Control Line).
- b) Roadway, parking lot, and utility leased lighting including “yard” or security 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 25 feet above the ground, or equivalent LED. 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, equivalent LED, or full cut-off high pressure sodium (HPS) lights 150 watts or less mounted no higher than 25 feet above the ground.

Sec. 5-95 Prohibition of Activities Disruptive to Sea Turtles The following activities will be prohibited on the beach from sunset to sunrise during nesting season for the protection of nesting females, nests and hatchlings:

- a) The operation of any and all motorized vehicles, except emergency and law enforcement vehicles or those permitted on the beach for sea turtle conservation research, or as necessary for authorized construction activities.
- b) The building of campfires or bonfires.
- c) Any transient lighting which purposely and flagrantly illuminates the beach, a nest, sea turtles, or hatchlings. This prohibition does not apply to individuals with appropriate permits from federal or state agencies.
- d) The leaving on the beaches within the Sea Turtle Conservation Zone of items of personal property including but not limited to canopies, picnic tables, coolers, tiki huts, volleyball nets, hammocks, tents (including tent frames), toys, towels, blankets beach chairs, umbrellas, cabanas, personal watercraft, boats, or other vessels that have the potential for entrapment of marine turtles and which may interfere with the use of the natural beach environment for nesting habitat is prohibited. During sea turtle nesting season, such items must be removed from the beach when not in use from sunset until sunrise and stored in areas situated to minimize interference with sea turtles.

Sec 5-96 Enforcement and Penalties. The enforcement and penalties of this section shall be as provided in Article of Chapter 11 of the County Code, as may be amended from time to time. Each day of any such violation shall constitute a separate and distinct offense. In addition to the Okaloosa County Code Enforcement Division, the Department of Environmental Protection or the Florida Fish and Wildlife Conservation Commission shall have authority to enforce the provisions contained herein.

Sec. 5-97 Interpretation The provisions of this section shall be construed in order to effectively carry out its purpose. Where any provisions of this section 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.

Section 2. Repealer

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 3. 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 4. Effective Date.

This ordinance shall take effect as provided by law.

PASSED AND DULY ADOPTED this _____ day of _____, 2018.

OKALOOSA COUNTY BOARD
OF COUNTY COMMISSIONERS:

Graham W. Fountain, Chairman

ATTEST:

J.D. Peacock II, Clerk

APPROVED AS TO FORM:

Gregory T. Stewart, County Attorney