

ARTICLE IV. MARINE TURTLE PROTECTION - Proposed Revisions

Sec. 5-61. Purpose and intent.

This article is intended to protect hatchling marine turtles from the adverse effects of artificial lighting, provide overall improvement in nesting habitat degraded by light pollution, and increase successful nesting activity and production of hatchings on the beaches of Franklin County, Florida. This ordinance is intended to supplement federal and state law, specifically Section 370.12, Florida Statutes (2004), (Marine Animals: regulation); chapter 68A-27 (Rules relating to Endangered or Threatened Species); and the Federal Endangered Species Act.

(Ord. No. ~~98-11~~, § I, 6-16-98)

Sec. 5-62. Definitions.

[The following words, terms and phrases, as used in this article, shall have the meanings respectively ascribed to them in this section, unless the context clearly indicates otherwise:]

Artificial light or *artificial lighting* means the light emanating from any human-made device or activities.

Beach means the zone of unconsolidated material that extends landward from the mean low water line to the place where there is a marked change in material or physiographic form, or to the line of permanent vegetation, usually the effective limit of storm waves.

BAT means best available technology

"Bug" type bulb means any yellow colored light bulb that is marketed as being specifically treated in such a way so as to reduce the attraction of bugs to the light.

Coastal construction activities means any work or development on any of the barrier islands or Alligator Point in Franklin County, Florida.

Coastal construction control line (CCCL) means the portion of the coastal construction line established pursuant to the provisions of F.S. section 161.053 that lies within Franklin County.

Cumulatively illuminated means illuminated by numerous artificial light sources that as a group illuminate any portion of the beach.

Directly illuminated means illuminated as a result of glowing element(s), lamp(s), globe(s), or reflector(s) of an artificial light source which is visible to an observer on the beach.

Dune means a mound or ridge of loose sediments, usually sand-sized, lying landward of the beach and deposited by any natural or artificial mechanism.

Frontal dune means the first natural or manmade mound or bluff of sand which is located landward of the beach and which has sufficient vegetation, height, continuity, and configuration to offer protective value.

Hatchling means any species of marine turtle, within or outside of a nest, that has recently hatched from an egg.

Indirectly illuminated means illuminated as a result of the glowing element(s), lamp(s), globe(s), or reflector(s) of an artificial light source which is not visible to an observer on the beach.

LED means light emitting diode

Formatted: Font: Not Italic

Formatted: Font: Not Italic

Low-pressure sodium luminaire (LPS) means an electric discharge lamp containing sodium, neon, and argon, that when illuminated appears amber-yellow.

Lumen is the SI unit of luminous flux, a measure of the perceived power of light.

Luminous flux differs from radiant flux, the measure of the total power of light emitted, in that luminous flux is adjusted to reflect the varying sensitivity of the human eye to different wavelengths of light. [Note: from Wikipedia]

Marine turtle means 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 purposes of this rule, marine turtle is synonymous with sea turtle.

Nanometer is a unit of length in the metric system. Our eyes are sensitive to light which lies in the region of the electromagnetic spectrum labeled "visible light" which corresponds to a wavelength range of 400 - 700 nanometers (nm) and a color range of violet through red. The visible colors from shortest to longest wavelength are: violet, blue, green, yellow, orange, and red.

Formatted: Font: Italic

Nest means an area where marine turtle eggs have been naturally deposited or subsequently relocated.

Nesting season means the period from May 1 through October 31.

Nighttime means the period between sunset and sunrise.

Person means individuals, firms, associations, joint ventures, partnerships, estates, trusts, syndicates, fiduciaries, corporations, and all other groups or combinations.

Pole lighting means a light fixture set on a base or pole which raises the source of the light higher than twenty-four (24) inches off the ground. [Note: may need to change this definition based on (5)c. under "New Construction" section.]

Shield means an opaque non-reflective covering, canopy or other such device fitted over and extended below a light source preventing light from illuminating the beach.

Tinted glass means any glass treated to achieve an industry-approved, inside-to-outside light transmittance value of forty-five (45) percent 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.

(Ord. No. 98-11, § II, 6-16-98)

Sec 5-63. Geographical areas covered by ordinance FC 98-11:

This ordinance shall apply to the following geographical areas of Franklin County

- 1) St George Island – all areas seaward of Gulf Beach Drive in the Gulf Beaches and East End areas and Leisure Lane in the St George Plantation. [Note: ?? how to address "the cut"; and to include the addition of new construction in all areas of St George Island in its entirety and, after May 1st 1010, to also include existing construction in all areas of St George Island.
- 2) Alligator Point – areas seaward of the CCCL
- 3) Dog Island – areas seaward of the CCCL

Formatted: Bullets and Numbering

Formatted: Superscript

Sec. 5-634. Standards for new construction activities.

In order to provide the highest level of protection for nesting marine turtles and their hatchlings, the following standards for artificial light sources on all new coastal