

## DIVISION 3. BEACHFRONT LIGHTING TO PROTECT MARINE TURTLES

### Sec. 8-241. Title and citation.

This division shall be known and may be cited as the "Neptune Beach Sea Turtle Protection Ordinance."

(Ord. No. 1999-01, § 1, 8-2-99)

### Sec. 8-242. Purpose.

The purpose of this division is to protect threatened and endangered marine turtles that nest along the beach of Neptune Beach, by safeguarding the nesting female and hatchling marine turtles from the adverse effects of artificial light and adult and hatchling marine turtles from injury or harassment.

(Ord. No. 1999-01, § 2, 8-2-99)

### Sec. 8-243. Jurisdiction.

The provisions of this division shall apply to the beaches of the Atlantic Ocean abutting the City of Neptune Beach. This division shall not have any effect outside of the marine turtle nesting season.

(Ord. No. 1999-01, § 3, 8-2-99)

### Sec. 8-244. Definitions.

For the purpose of this division, certain terms and words are defined as follows:

Artificial light means any source of light emanating from a human made device.

Beach means that area 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 non-pioneering vegetation.

Bug light or 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 insects to the light.

City means the City of Neptune Beach, a political subdivision of the State of Florida.

Coastal construction activities means any work or activity that may have a physical effect on existing coastal conditions or natural shore and inlet processes.

Coastal construction control line (CCCL) means the portion of the coastal control line established pursuant to the provisions of F.S. § 161.053 that lies within the City of Neptune Beach.

Cumulatively illuminated means illuminated by numerous artificial light sources that as a group illuminate any portion of the beach. Such cumulative illumination must be bright enough to cast a shadow on any portion of the beach during any night of the sea turtle nesting season.

Department means the Florida Department of Environmental Protection (FDEP).

Directly illuminated means illuminated as a result of glowing element(s), lamp(s), globe(s), or reflector(s) or any 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, which may be bare or covered with vegetation, and is subject to fluctuations in configuration and location.

Frontal or fore dune means the first line of continuous and dynamic dunes (either natural or man made) encountered landward of the active beach.

Ground level barrier means any vegetation, natural feature or artificial structure rising from the ground that prevents beachfront lighting from shining directly onto the beach or dunes.

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) or any artificial light source which is not visible to an observer on the beach.

Inspector means an inspector designated by the City of Neptune Beach.

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

Low profile luminaire means a light fixture set on a base which raises the source of light no higher than twenty four (24) inches above the ground, and is designed in such a way that light is directed downward from a hooded light source.

Marine turtle means any marine dwelling reptile of the families Cheloniidae or Dermochelyidae found in Florida waters and using the beach as nesting habitat including the species: *Caretta caretta* (loggerhead), *Chelonia mydas* (green), *Dermochelys coriacea* (leatherback), *Eretmochelys imbricata* (hawksbill), and *Lepidochelys Kemp* (Kemp's Ridley). For purposes of this ordinance, marine turtle is synonymous with sea turtle.

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

Nesting season means the period from May 1 to October 31 of each year.

New development means new construction and remodeling of existing structures when such remodeling includes alteration of exterior lighting.

Person means any individual, firm, association, joint venture, partnership, estate, trust syndicate, fiduciary, corporation, group, unit of federal, state, county or municipal government, and all other groups or combinations thereof.

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.

Primary dune means the most seaward dune with sufficient alongshore continuity which has sufficient height and configuration or vegetation to offer protective value.

Publicly owned light means lighting installed by a public or private entity which is owned by, or rented or leased to a governmental agency, or lighting installed on public property.

Red light emitting diodes (LED) means miniature lamps that emit pure red light that does not vary in color over the life of the lamp. These lamps may be used in multiples to form strips of small lamps within a light fixture.

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

Tinted or filmed 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--700 nanometers) and is measured as the percentage of light that is transmitted through the glass.

True neon means a tubular lamp containing neon gas that emits pure red light. Not to be confused with tubular fluorescent lamps which may appear as various colors.

(Ord. No. 1999-01, § 4, 8-2-99)

Sec. 8-245. Standard for new development.

New development, coastal construction, and building and electrical plans for construction of any structure shall be in compliance with the following, if the proposed development is waterward of the Coastal Construction Control Line (CCCL), or if the development creates any light sources that will be visible from the beach. Provisions of this section apply, but are not limited to all new coastal construction and development, including electrical plans associated with parking lots, dune walkovers, or other outdoor lighting for real property.

(1) Exterior artificial light fixtures shall be designed and positioned so that:

- a. The point source of light or any reflective surface of the light fixture is not directly visible from the beach;
- b. Areas seaward of the primary dune, or the beach in areas where the primary dune no longer exists are not directly or indirectly illuminated; and
- c. Areas seaward of the primary dune, or the beach in areas where the primary dunes no longer exists are not cumulatively illuminated.

(2) Exterior artificial light fixtures within direct line of sight of the beach are allowed if:

- a. Exterior lights are completely shielded downlight only fixtures or recessed fixtures with non-reflective interior surfaces. These fixtures must have low wattage (i.e. 25 watts or less) "bug" type bulbs, low pressure sodium vapor (LPS) bulbs, red light emitting diodes (LED) or true neon light sources. Other fixtures that have light blocking shields, louvers, or cutoff features may also be used if they are in compliance with subsection (1) above; and
- b. All fixtures are mounted as low in elevation as possible through use of low-bollards and ground level fixtures.

(3) Floodlights, uplights or spotlights that are directly visible from the beach, or which indirectly or

cumulatively illuminate the beach are prohibited.

(4) The use of motion detector switches that keep lights off except when approached and that switch lights on for the minimum duration possible are required for any exterior lights used expressly for safety or security.

(5) Dune crosswalks may be lighted. If lighted, dune crosswalks shall utilize low profile shielded luminaries directed and positioned so that the point source of light or any reflective surface of the light fixtures is not directly visible to a person on the beach. All light fixtures on dune cross walks must utilize low wattage (i.e., 25 watts or less) "bug" type bulbs, low pressure sodium vapor (LPS) bulbs, red light emitting diodes (LED) or true neon light sources. Dune crosswalk lighting seaward of the primary dune, or on the beach in areas where the primary dune no longer exists shall not be used.

(6) In parking areas with direct line of sight of the beach all lighting shall be:

a. Set on low profile luminaire; and

b. Positioned or shielded so that the light is cast downward and the source or light or any reflective surface of the light fixture is not visible from the beach and does not directly, indirectly or cumulatively illuminate the beach.

(7) Except for single-family residences, all newly constructed parking areas and driveways, including any paved or unpaved areas upon which motorized vehicles will park or operate, shall be designed and located to prevent vehicular headlights from directly or indirectly illuminating the beach.

(8) Parking area lighting, and roadway lighting shall be shielded from the beach through the use of ground level barriers. Ground level barriers must not impede or entangle marine turtles or hatchling, or cause short or long term damage to the beach/dune system.

(9) Tinted glass shall be installed on all windows and doors of single or multistory commercial structures within direct line of sight of the beach. It is recommended, but not mandatory, that tinted glass be installed on all windows and doors of single or multistory residential structures within direct line of sight of the beach. Tint or film must meet the standards for tinted glass stated in section 8-244 above.

(10) Temporary lighting of construction-sites during the marine turtle nesting season shall be restricted to the minimal amount necessary and shall incorporate all of the standards of this section. Said lighting shall not be mounted more than eight (8) feet above the ground.

(11) Upon the issuance of a certificate of occupancy for any new development within direct line of sight of the beach, compliance with the beachfront lighting standards set forth in this division shall be approved as follows:

a. Upon completion of the construction activities, the inspector shall conduct a site inspection which includes a night survey with all beachfront lighting turned on.

b. The city inspector shall prepare and report the inspection findings in writing identifying:

i. The date and time of initial inspections;

ii. The extent of compliance with the lighting standards;

iii. All areas of observed noncompliance, if applicable;

iv. Any action(s) taken to remedy observed noncompliance, if applicable.

The inspector, in cases where remedial action is necessary, shall notify the owner or developer of the results of the inspection and shall schedule a date and time for a subsequent inspection.

(Ord. No. 1999-01, § 5, 8-2-99)

#### Sec. 8-246. Standards for existing development.

By May 1, 2000, all light sources or reflective surfaces illuminated by such sources that are visible from the beach shall be brought into compliance with the following:

(1) Existing artificial light fixtures shall be repositioned, modified, replaced, or removed so that:

- a. The point source of light or any reflective surface of the light fixture is not directly visible from the beach;
- b. Areas seaward of the primary dune or the beach in areas where the primary dune no longer exists are not directly or indirectly illuminated; and
- c. Areas seaward of the primary dune, or the beach in areas where the primary dune no longer exists are not cumulatively illuminated.

(2) One or more of the following measures shall be taken to reduce or eliminate the negative effects of existing exterior artificial lighting, so that all existing development is in full compliance with subsection (1) above:

- a. Reposition fixtures so that the point source of light or any reflective surface of the light fixture is no longer visible from the beach;
- b. Replace fixtures having an exposed light source with fixtures containing recessed light sources or shield;
- c. Replace traditional light bulbs (e.g. incandescent, fluorescent, and high intensity lighting) with yellow "bug" type bulbs not exceeding twenty-five (25) watts, low pressure sodium vapor (LPS) bulbs, red light emitting diodes (LED) or true neon light sources;
- d. Replace non directional fixtures with directional fixtures that point down and away from the beach;
- e. Replace fixtures having transparent or translucent coverings with fixtures having opaque shields designed to be in compliance with subsection (1) above, and extending an appropriate distance below the bottom edge of the fixture on the seaward side so that the light source or any reflective surface of the light fixture is not visible from the beach;
- f. Replace pole lamps with low profile, low-level luminaries so that the light source of any reflective surface of the light fixture is not visible from the beach.
- g. Plant or improve native vegetation buffers between the light source and the beach sufficient to screen light from the beach.
- h. Construct a ground level barrier to shield light sources from the beach. Ground level barriers must not interfere with marine turtle nesting or hatchling emergence, or cause short or long-term damage to

the beach/dune system; and

i. Permanently remove, disable or lock in off position any fixture which cannot be brought into compliance with the provisions of these standards.

(3) One or more of the following measures shall be taken to reduce or eliminate the negative effects of interior light emanating from doors and windows within direct line of sight of the beach so that all existing development is in full compliance with subsection (1) above;

a. Apply window tint or film that meets the standards for tinted glass in section 8-244 above.

b. Rearrange lamps and other moveable fixtures away from windows;

c. Use window treatments (e.g. blinds, curtains) to shield interior lights from the beach; and/or

d. Turn off unnecessary light.

(4) The city council is authorized to grant variances to date of compliance after notice to the owner and a public hearing, where lighting installed before May 1, 2000 would be in violation of this section. Such variances may be granted only where the applicant has demonstrated that the application of these standards to such lighting will cause such an undue and unique hardship to the property, and that more time is needed to amortize the owner's reasonable investment in the lighting. In granting a variance, the council shall specify a schedule and plan to attain full compliance. Violation of the terms of such a plan or schedule shall constitute a violation of this division.

(Ord. No. 1999-01, § 6, 8-2-99)

Sec. 8-247. Standards for publicly owned lighting.

All publicly owned lighting with light sources that are visible from the beach or that illuminate reflective surfaces that are visible from the beach including but not limited to street lights, parking lot lights, and beach access lighting, shall be: 1) fitted with a shield or positioned so that the light source or any reflective surfaces illuminated by such sources are not visible from the beach and do not directly or indirectly illuminate the beach; or 2) shall be extinguished between sunset and sunrise from May 1 to October 31 of each year.

(Ord. No. 1999-01, § 7, 8-2-99)

Sec. 8-248. Unlawful to kill, molest or injure marine turtles.

In accordance with Chapter 370, Florida Statutes and the U.S. Endangered Species Act of 1973, it shall be unlawful for any person to kill, molest, harass, or cause direct or indirect injury to any species of marine turtle in the City of Neptune Beach or within its jurisdictional waters. It shall be unlawful to collect or possess any part of a marine turtle, turtle nest and /or egg(s). The City of Neptune Beach will cooperate with appropriate state and federal agencies in prosecuting violations of the Act.

(Ord. No. 1999-01, § 8, 8-2-99)

Sec. 8-249. Education and information.

The City of Neptune Beach will cooperate with the FDEP and/or a private not-for-profit organization in preparing and distributing brochures to coastal establishments and residents and making presentations about the effects of light on endangered sea turtle reproduction and about sea turtle biology, generally. The city shall notice first time violators of the sea turtle lighting ordinance by sending a letter, certified mail, return receipt requested, to the offender describing their violation and enclosing brochure and summary of the ordinance. Subsequent offenses will be treated with enforcement measures as described in section 8-250.

(Ord. No. 1999-01, § 9, 8-2-99)

Sec. 8-250. Civil and administrative enforcement powers; criminal penalties.

(a) The city shall have the power to enforce the provisions of this division by equitable or legal judicial proceedings, including civil infractions as set forth below, as well as by any other legal or administrative mean, including code enforcement proceedings as set out in chapter 27 of the Code of Ordinances as amended, and F.S. § 162. Each day of any such violation shall not constitute a separate and distinct offense.

(b) No permit may be issued by the city to improve or expand any facility constructed or modified in violation of this division, unless the violation has been corrected.

(c) A violation of any of the provisions of this division shall be a civil infraction punishable by a civil penalty in an amount not to exceed five hundred dollars (\$500.00). Except, any violation of this division which is also a violation of F.S. § 370.021, shall be punishable as set in § 370.021. Each day of any such violation shall not constitute a separate and distinct offense.

(Ord. No. 1999-01, § 10, 8-2-99)

Secs. 8-251--8-255. Reserved.