CODE OF ORDINANCES Chapter 6 - ANIMALS ARTICLE III. - SEA TURTLES

DIVISION 2. - BEACH AREA ARTIFICIAL LIGHTING RESTRICTIONS

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Sec. 6-45. - Purpose.

The purpose of this division is to reduce the impacts of artificial coastal lighting on threatened and endangered sea turtles that nest on the beaches of Fort Lauderdale by restricting artificial lighting that disorients turtles hatchlings, causing them to crawl toward land rather than toward the ocean. The restrictions and constraints of this division shall be effective within the incorporated areas of Fort Lauderdale and apply to any coastal lighting activity that has the potential to adversely impact sea turtles within city limits.

Sec. 6-46. - Definitions.

For purposes of this section, the following definitions shall apply:

Artificial light means the light emanating from any human-made device.

Beach means the zone of unconsolidated material that extends landward from the mean low-water line of the Atlantic Ocean, 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.

Beach Front Lighting means all artificial light visible from the sand that shall illuminate any area of the beach

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

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.

Filmed glass means window glass that has been covered with a film such that the material has a shading coefficient of forty-five (45) percent or less, adhesive as an integral part, and has performance claims that are supported by approved testing procedures and documentation.

Frontal dune means the first natural or man-made 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.

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

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 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.

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 imbricate (hawksbill), and Lepidochelys kempi (Kemp's ridley). For purposes of this rule, 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 March 1 through October 31 of each year.

Nighttime means the time period between sunset and sunrise within incorporated Fort Lauderdale.

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

Solar screens means screens that are fixed installations and permanently project shade over the entire glass area of the window. The screens must be installed on the outside of the glass and must have a shading coefficient of forty-five (45) percent or less and have performance claims supported by approved testing procedures and documentation.

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 (four hundred (400) to seven hundred (700) nanometers) and is measured as the percentage of light that is transmitted through the glass.

Sec. 6-47. - Prohibition of activities disruptive to marine turtles.

The following activities involving direct illumination of portions of the beach are prohibited on the beach at nighttime during the nesting season for the protection of nesting females, nests and hatchlings:

- (1) The operation of all motorized vehicles, except emergency and enforcement vehicles or those permitted on the beach for marine turtle conservation, research or beach maintenance.
 - (2) The building of campfires or bonfires.

Sec. 6-48. - Standards for new Beachfront lighting

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

- (1) Existing 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 frontal dune are not directly or indirectly illuminated; and
 - (c) Areas seaward of the frontal dune are not cumulatively illuminated.
- (2) Exterior artificial light fixtures within direct line-of-sight of the beach are considered appropriately designed if;
 - (a) Completely shielded downlight only fixtures, or recessed fixtures having low wattage consistent with Florida Fish and Wildlife Conservation Commission requirements and non-reflective interior surfaces are used. Other fixtures that have appropriate shields, louvers or cut-off features may also be used if they are in compliance with the requirements of paragraphs (1)(a), (b), and (c) above; and
 - (b) All fixtures are mounted as low in elevation as possible through use of low-mounted wall fixtures, low bollards, and ground-level fixtures.

- (3) Floodlights, up lights or spotlights for decorative and accent purposes that are directly visible from the beach, or indirectly or cumulatively illuminate the beach, shall not be used excepting City use on City maintained public walkways.
- (4) Exterior lights used expressly for safety or security purposes shall be limited to the minimum number and configuration required to achieve their functioning role(s). The use of motion detector switches that keep lights off except when approached, and that switch lights on for the minimum duration possible are preferred.
- (5) Only low intensity lighting shall be used in parking areas within line-of-sight of the beach. Such lighting shall be:
 - (a) Set on a base which raises the source of light no higher than 48 inches off the ground: and
 - (b) Positioned or shielded so that the light is cast downward and the source of light or any reflective surface of the light fixture is not visible from the beach and does not directly or indirectly illuminate the beach.
- (6) Parking areas and roadways, 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.
- (7) Vehicular lighting, parking area lighting, and roadway lighting shall be shielded from the beach through the use of ground-level barriers. 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.
- (8) Tinted glass shall be installed on all windows and glass doors of single and multistory structures within line-of-sight of the beach.
- (9) Parking areas and structures shall be designed and located to prevent vehicular headlights from directly or indirectly illuminating the beach. Parking area and parking structure lighting shall be shielded from the beach through the use of shields that direct light away from the beach, and ground-level barriers designed in conformance to the CPTED principals. Such ground-level barriers shall not interfere with marine turtle nesting or hatchling emergence and shall not cause short or long-term damage to the beach/dune system. Entrances and exits to parking structures shall not face the ocean. Surfaces of parking areas shall not contain ground glass or other reflexive material.
- (10) Use of appropriately shielded low pressure sodium vapor lamps and fixtures shall be preferred for high-intensity lighting applications such as lighting parking areas and roadways, providing security, and similar applications.
- (11) No roof top advertising sign that is illuminated in any fashion shall be permitted.

(12) Temporary lighting of construction sites during the marine turtle nesting season shall be restricted to the minimum amount necessary and shall incorporate all of the standards of this section.

Sec. 6-49. - Standards for existing beachfront lighting.

In order to provide the highest level of protection for nesting marine turtles and their hatchlings, the following standards apply to existing artificial beachfront lighting sources:

- (1) Existing artificial light fixtures shall be repositioned, modified, 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 frontal dune are not directly or indirectly illuminated; and
 - (c) Areas seaward of the frontal dune are not cumulatively illuminated.
- (2) The following measures shall be taken to reduce or eliminate the negative effects of existing exterior artificial lighting:
 - (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 shields:
 - (c) Replace traditional light bulbs with bulbs consistent with Florida Fish and Wildlife Conservation Commission requirements;
 - (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 covering an arc of at least 180 degrees 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 or any reflective surface of the light fixture is not visible from the beach;
 - (g) Replace incandescent, fluorescent, and high intensity lighting with the lowest wattage low pressure sodium vapor lighting possible for the specific application;

- (h) Plant or improve vegetation buffers between the light source and the beach to screen light from the beach;
- (i) 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 must be approved by Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission and the City of Fort Lauderdale;
- (j) Permanently remove or permanently disable any fixture which cannot be brought into compliance with the provisions of these standards.
- (3) The following measures shall be taken to reduce or eliminate the negative effects of interior light emanating from doors and windows within line-of-sight of the beach;
 - (a) Apply window tint or film that meets the standards for tinted glass;
 - (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
 - (d) Turn off unnecessary lights.

Sec. 6-50. - Penalty.

Violation of the provisions of this division or failure to comply with any of its requirements shall constitute an offense. When it has been determined that a violation has occurred, notice of the violation and an opportunity for a hearing shall be served on the person or persons responsible. Upon refusal, failure or neglect of the person or persons served with a notice of violation to cure the violation, and when the violator or the violator's representatives do not appear at the hearing granted pursuant to this Code or as otherwise provided by law, or when an order finding a violation is entered against the violator, the enforcing agency shall notify the violator, in writing, that an external lighting source causing the violation may be removed by the city within ten (10) business days thereafter, or that a fine may be assessed against the violator, with said fine to begin to be assessed within ten (10) business days thereafter, and to be continuously assessed until the conclusion of nesting season or until the violation is corrected. Costs associated with the removal by the city of external lighting sources causing violations shall be recovered from the person or persons causing the violation, and, if not recovered from the person or persons, shall be placed as a lien against the property and reimbursed to the city at time of sale of the property.

(Ord. No. C-03-9, § 1, 2-18-03)