Marine turtle nesting and hatching occurs each year from May 1st through October 31st. Female turtles come ashore in the dark, dig a hole using their flippers, and lay 100 to 150 eggs at a time. As they're approaching a beach from the sea, females instinctually seek out dark places to deposit their eggs. Bright lights can deter females from coming ashore at all. If they come ashore despite the lights, they can be lured away from the sea.

During the course of a season, a single female lays three to eight nests. After a 45 to 70 day gestation period, hatchlings emerge from the nest at night and follow the moonlight reflecting off the Gulf.

Sea turtles can become disoriented from lights and illuminated objects visible from the beach. Most importantly, bright lights disorient hatchlings by attracting them inland where they often die of dehydration, predation, or are run over by motor vehicles. It is very important that occupants and managers of beachfront properties minimize the use lights that shine directly on the beach. Information about turtle friendly beach lighting can be found on the Florida Fish and Wildlife Conservation Commission website. There are also vendors that provide Turtle Friendly Lighting.

Daily early morning surveys for nests are performed during nesting season between May and November each year. Pinellas County contracts with the <u>Clearwater Marine</u>

<u>Aquarium</u> to monitor sea turtle nesting along all the nourished beaches. When nourishment projects are constructed, the aquarium staff relocates turtle nests within construction zones to areas outside of the construction zones, thus protecting the eggs from damage.

Since the late 1980s, it is believed that <u>nourishment</u> <u>projects</u> have had a positive impact on sea turtle nesting in Pinellas County. Prior to the nourishment projects, portions of Sand Key had no dry beach and thus no nesting habitat for marine sea turtles. Since 2000, the annual number of total nests observed along the Pinellas County beaches of Sand Key, Treasure Island, and Long Key

(St. Pete Beach) has varied from 38 in 2007 to 195 in 2003. Without the habitat provided by periodic nourishment projects, the number of nests laid each year would be much lower.

Under local ordinances designed to protect sea turtle nesting, from May 1 to Oct. 31, all indoor and outdoor lights visible from the beach must be shielded, repositioned, replaced or turned off from 9 p.m. to 5 a.m.

Don't use outdoor, decorative lighting of any color that is visible from the beach. Reduce interior lighting by applying window tint (using 15% light transmittance level), or have opaque curtains or blinds and keep them closed after sunset. Turn on your dining room light and porch light and take a walk down to the beach. If the lights are visible, use curtains and different light bulbs as discussed.

Bright beach lights, flashlights, flash cameras, video recorders and other types of artificial lighting aren't allowed either.

Disturbing a sea turtle, its nests or hatchlings is illegal.

Do:

- · If you encounter a nesting turtle, remain quiet and observe from a distance.
- · Shield or turn off outdoor lights that are visible on the beach. Artificial lights can affect sea turtle behavior. (For

instance, the hatchings instincts tell them to crawl towards the brightest thing, which should be the sea. If they end up crawling towards the highway instead.

- · <u>Close drapes after dark</u> and put beach furniture far back from the water.
- · Fill in holes that may entrap hatchlings on their way to the water.
- · Place trash in its proper place.

Don't:

- · Approach nesting turtles or hatchlings, make noise or shine lights at turtles
- · Use flashlights or fishing lamps on the beach
- · Encourage a turtle to move while nesting or pick up hatchlings that have emerged and are heading for the water
- · Use fireworks on the beach

Bulbs that are sea turtle-friendly utilize longwavelength light (580 nanometers or longer), such as lights that are yellow, amber, or red in color.

Here is one example of a sea turtle friendly light. There are many others.

https://www.voltlighting.com/2w-turtle-safe-amber-ledbi-pin-bulb 813-978-3700

VOLT® 2W Turtle Safe Amber LED Bi-Pin Bulb (15w Halogen Replacement)

Specifically manufactured with Turtle Safety in mind.

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The Forever Bulb® - Lifetime Warranty

In stock

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\$8.97

If you live in Pinellas, Manatee, Sarasota, Charlotte, Lee or Collier counties and are interested in retrofitting your beachfront property, call Sea Turtle Conservancy at 352-373-6441.

Sea Turtle Conservancy 4581 NW 6th St, Suite A Gainesville, FL 32609

Phone: 352-373-6441

Fax: 352-375-2449

stc@conserveturtles.org

PINELLAS COUNTY MARINE TURTLE STATUTE

ARTICLE IV. - MARINE TURTLES

• Sec. 6-80. - Purpose of article.

The purpose of this article is to implement the provisions of Section 161.163, Florida Statutes, which requires the State of Florida to designate coastal areas utilized, or likely to be utilized, by sea turtles for nesting, and to establish guidelines for local government regulations that control beachfront lighting to protect hatching marine turtles.

This article is also intended to ensure that all new and existing developments, construction, properties, erected or maintained outdoor lighting does not cast glare or spill light where it may deter adult female turtles from nesting or disorient turtle hatchlings as they return to the sea from May 1 through October 31 of each year.

(Ord. No. 08-05, § 1, 9-4-2008)

• Sec. 6-81. - Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Artificial light means any source of light emanating from a manmade device, including, but not limited to, incandescent, mercury vapor, metal halide, sodium spotlights, streetlights, or construction or security

lights, but shall not include any specially colored lights approved by the Florida Wildlife and Game Commission or Florida Environmental Protection Agency which do not disorient turtles or turtle hatchlings.

Beach access point means any access used by the general public or private property owners for the purpose of gaining access to the beach.

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.

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.

Deflected light means unintentional indirect luminance from structures or objects incidental to the light source or fixture.

Floodlight means a reflector type light fixture which is attached directly to a building or post and which is unshielded.

Glare means the sensation produced by luminance within the visual field that is sufficiently greater than the luminance to which the eyes are adapted to cause annoyance, discomfort, or loss in visual performance and visibility.

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 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.

Nesting and hatching season means the period from May 1 through October 31 of each year.

Outdoor lighting/outdoor lighting fixture means any light-emitting device which causes any illumination beyond the exterior walls of any structure or building.

Pole lighting means a lighting fixture set on a base or pole which raises the source of the light higher than 48 inches off the ground.

(Ord. No. 08-05, § 1, 9-4-2008)

• Sec. 6-82. - Prohibition of activities disruptive to marine turtles.

The following activities involving direct illumination of portions of the beach are prohibited on the Gulf Coast beach within the City of Belleair Beach during hours of darkness in the turtle nesting season for the protection of nesting females, nests, and hatchling marine turtles:

(1) The operation of all motorized vehicles, except emergency and law enforcement vehicles or those permitted on the beach for marine turtle conservation or research.

(2)

(2) The building of campfires or bonfires.

(Ord. No. 08-05, § 1, 9-4-2008)

• Sec. 6-84. - Standards for existing beachfront lighting.

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

- (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 any frontal dune are not directly or indirectly illuminated; and
- c. Areas seaward of any 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 yellow bug-type bulbs not exceeding 50 watts;
- d. Replace nondirectional 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-term or long-term damage to the beach;

- 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.

This article, for reasons of public safety, shall not apply to streetlights or traffic control devices erected or maintained by any government entity on a designated state, county or municipal road, or to fixed outdoor lights or outdoor lighting fixtures used at government-operated facilities, except as provided for in sections 6-83 and 6-84.

• Sec. 6-86. - Penalty; additional remedies.

After October 1, 2008, violation of this article shall be punishable as provided in <u>section 1-15</u> of the City Code. Further, in addition to the criminal penalties provided, the city council is hereby authorized to

institute any appropriate civil action or proceeding, including a suit for injunctive relief, in order to prevent or abate violations of this article.

(Ord. No. 08-05, § 1, 9-4-2008)

Code Enforcement Contact: Jack White 727-595-4646 ext 133