## COUNCIL AGENDA STATEMENT

<b>Meeting Date:</b>	June 13, 2023
To:	Honorable Mayor and Council Members
From:	Brian Shea, Planning Director
Through:	George Garrett, City Manager



Agenda Item: Ordinance 2023-10, Amending Chapter 14 "Environment and Natural Resources", Article 3 "Protection of Sea Turtles", Amending Section 14-61 "Definitions", Amending Section 14-63 "Standards for exterior artificial lighting", Amending Section 14-64 "Standards for Interior artificial lighting", Adding Section 14-68 "Applicability", Amending Sections 14-68 through 14-92 "Reserved"; Of The City Of Marathon Code of Ordinances; Providing For The Repeal Of All Code Provisions And Ordinances Inconsistent With This Ordinance; Providing For Severability; Providing For Inclusion In The Code.

### **<u>RECOMMENDATION:</u>**

Staff recommends APPROVAL

**APPLICANT:** City of Marathon

**REQUEST:** The proposed ordinance has been proposed to modify language in Chapter 14, "Environmental and Natural Resources" Article 3 "Protection of Sea Turtles"

The proposed Ordinance does the following:

### ARTICLE III. - PROTECTION OF SEA TURTLES

Sec. 14-61. - 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:

Adjacent waters means waters abutting a nesting area and extending 300 feet to either side of it, and out to either 300 yards offshore or the limits of the property line, whichever is further.

Artificial light or artificial lighting means any point source of light emanating from a bulb, lamp, filament or other manmade source within a fixture that emanates 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.

*Beach* means the zone of unconsolidated material that extends landward from the mean lowwater 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.

*Beach berm* means a bare, sandy shoreline with a mound or ridge of unconsolidated sand that is immediately landward of, and usually parallel to, the shoreline and beach. The sand is calcareous material that is the remains of marine organisms such as corals, algae and mollusks. The berm may include forested, coastal ridges and may be colonized by hammock vegetation.

*Cumulatively* <u>visible</u>-illuminated means illuminated light from by numerous artificial light sources that as a group illuminate can be seen any portion of the beach or dune system seaward of the crest of the primary dune or that are visible to by an observer standing anywhere on the beach.

Daylight hours means the locally effective time period between sunrise and sunset.

*Directly* illuminated <u>visible</u> means illuminated as a result of glowing elements, lamps, globes, or reflectors of an artificial light source that is visible <u>can be seen by</u> an observer standing anywhere on the beach.

*Disorientation* means the inability of hatchling or adult sea turtles to orient properly to the ocean.

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

*Full cut-off fixture* means 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; a lighting fixture constructed in such a manner that no light emitted by the fixture, either directly from the lamp or a diffusing element or indirectly by reflection or refraction from any part of the luminaire, is projected at or above 90° as determined by photometric test or certified by the fixture manufacturer.

*Fully Shielded* means a lighting fixture constructed in such a manner that the glowing elements, lamps, globes, or reflectors of the fixture are completely covered by an opaque material to prevent them from being directly visible from the beach. Any structural part of the light fixture providing this shielding must be permanently affixed.

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

*Indirectly <u>illuminated visible</u>* means <u>illuminated light reflected from</u> as a result of the <u>a</u> glowing element, lamp, globe, or reflector of an artificial light source, which source is not directly visible <u>can be seen by to</u> an observer <u>standing anywhere</u> on the beach.

*Jurisdictional boundaries, sea turtle protection* means the area on contiguous land within 300 feet of a nesting area.

*Long wavelength* means the light with wavelengths <u>560 nm or</u> greater <u>and absent</u> <u>wavelengths below 560 nanometers</u> <u>than 560 nm</u> that emit light in the yellow to red color spectrum.

*Low-pressure sodium light* means an electric discharge lamp containing sodium, neon, and argon and that appears amber-yellow when lighted.

*Mechanical beach cleaning* means any mechanical means by which debris, including but not restricted to trash, litter, seaweed or seagrass wrack, is removed from the beach.

*Nest* means the area in and around a place in which sea turtle eggs are naturally deposited or relocated beneath the sediments of the beach.

*Nesting area, potential* means those areas identified in the City of Marathon's Comprehensive Plan map series as potential sea turtle nesting area.

*Nesting area, identified,* means any area where sea turtles have been or are currently nesting, and the adjacent beach or other intertidal areas used for access by the turtles.

Nesting area, potential, means any area where sea turtle crawls have been observed.

Nesting season means the period from April 15 through October 31 of each year.

*Permitted agent of the State* means any qualified individual, group or organization possessing a permit from the Department of Environmental Protection or by the Florida Fish and Wildlife Conservation Commission to conduct activities related to sea turtle protection and conservation.

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

*Recessed ceiling fixture* means the fixture recessed into the ceiling such that no portion of the lamp extends below the horizontal plane of the ceiling.

*Sea turtle* means any specimen belonging to the species Caretta caretta (loggerhead turtle), Chelonia mydas (green turtle), Dermochelys coriacea (leatherback turtle), Eretmochelys imbricata (hawksbill turtle) or any other marine turtle using City beaches as a nesting habitat.

<u>Sea Turtle Lighting District shall include all properties within the City of Marathon, that</u> may produce artificial light directly, indirectly, or cumulatively visible from any portion of the beach, regardless of whether those properties are beachfront properties

Sea turtle nesting season means the period from April 15 through October 31 of each year.

*Shield* means an opaque 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.

*Tinted glass* means any glass treated to achieve an industry-approved inside-to-outside light transmittal value of 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.

*Translucent fixture* means 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.

*Uplighting* means lighting fixtures that are directed upward, usually onto objects (flags, monuments, signs, buildings, landscape, etc.).

*Wildlife lighting* means artificial lighting <u>fixtures and bulbs</u> that minimizes the potential for negative affects to the nocturnal behaviors of nesting and hatchling sea turtles and other wildlife. The following criteria apply:

- (1) The light source is mounted as low to the ground or floor as practicable through the use of fixtures such as, low-mounted wall fixtures, low bollards, and ground-level fixtures;
- (2) The lumens emitted by the light source are the minimal required for the intended application;
- (3) 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;
- (4) The lamps emitting predominately long-wavelength light (>560 nm). These long wavelength light sources include low-pressure sodium vapor lamps, amber and red LEDs, true red neon lamps, and other lamps certified by the Florida Fish and Wildlife Conservation Commission as "wildlife lighting". See <a href="https://myfwc.com/conservation/you-conserve/lighting/criteria/certified/">https://myfwc.com/conservation/you-conserve/lighting/criteria/certified/</a>.

Window tinting means tinting or film that meets the standards for tinted glass.

Sec. 14-62. - Prohibition of activities disruptive to sea turtles.

- (a) *Prohibition of horseback riding, campfires, and vehicular traffic.* Horseback riding and campfires shall be prohibited on nesting areas during the nesting season. Vehicular traffic shall also be prohibited on nesting areas during the nesting season except for emergency and law enforcement vehicles, vehicles permitted on the beach for marine turtle conservation or research, or vehicles used for beach cleaning in compliance with Section 14-65, standards for mechanical beach cleaning.
- (b) Prohibiting storage or placement of any material in the nesting area. The storage or placement of any material, such as, but not limited to, construction material, rip-rap, trash and debris, mulch, beach wrack/seagrass, or other organic material, landscaping material, fill, vehicles, or boats, that has the potential to impede movement of hatchlings or adults between ocean and nesting areas, or that may cover existing nests or nesting sites is strictly prohibited.
- (c) *Development*. All development shall be set back a minimum of 50 feet from any area that serves as an active or potential nesting area for marine turtles. The 50-foot setback will be measured from the landward toe of the most landward beach berm or from 50 feet landward of mean high water (MHW), whichever results in the smaller total setback. The maximum total setback shall be 100 feet from MHW.
- (d) If any turtle nests or nesting activities have been reported within a portion of a beach, any temporary structures, including, but not limited to, beach chairs, umbrellas and cabanas which have the potential for entrapment of marine turtles and which may interfere with the use of the natural beach environment for nesting habitat shall be:
  - (1) Removed from the beach nightly; or
  - (2) Stored in areas designated by the City staff which are situated to avoid interference with marine turtles; or

(3) Placed in a manner so as to not obstruct the transit of turtle hatchlings to the water. Placement should include stacking in a staggered pattern at the landward edge of the beach.

Sec. 14-63. - Standards for exterior artificial lighting.

To prevent exterior artificial lighting from illuminating the jurisdictional boundaries or adjacent waters during the nesting season, the following measures shall be taken to reduce or eliminate disorientation and other negative effects of new or existing artificial lighting:

- (1) Exterior artificial light fixtures <u>directly</u>, <u>indirectly</u>, <u>or cumulatively visible from any</u> <u>portion</u> within direct line of sight of the beach shall be designed, positioned, modified, or removed so that:
  - a. <u>They are long wavelength</u>, downward directed, full cutoff, fully shielded and mounted as close to the ground or finished floor surface as possible to achieve the required foot-candles

**a.** <u>b.</u> The point source of light or any reflective surface of the light fixture is not <u>directly</u>, <u>indirectly</u>, <u>or cumulatively</u> visible to an observer standing anywhere on the beach.

b. The area within the jurisdictional boundaries is not directly or indirectly illuminated.

c. The area within the jurisdictional boundaries is not cumulatively illuminated.

- (2) Measures such as, but not limited to, the following shall be taken to reduce or eliminate the negative effects of new or existing artificial beachfront lighting:
  - a. Positioning of fixtures so that the point source of light or any reflective surface of the light fixture is eliminated or is no longer visible to an observer standing anywhere on the beach.
  - b. Replacement of fixtures having an exposed light source with fixtures containing recessed light sources or shields.
  - c. <u>Replace any light source, light bulb or lamp that is not long wavelength (e.g. incandescent, fluorescent, or high intensity lighting) with the lowest wattage long wavelength (e.g. LED or low pressure sodium) light source or lamp available for the specific application. Replacement of traditional lightbulbs with ling wavelengths lights, red, orange or amber LEDs, low pressure sodium vapor lamps, or other wildlife lighting.</u>
  - d. Replacement of nondirectional fixtures with completely shielded directional fixtures that point down and away from the beach.
  - e. <u>Provide shields for fixtures visible from the beach and not practical to immediately</u> be replaced. Beachside shields are to cover 270 degrees and extend 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;</u>

e. Replacement of fixtures having transparent or translucent covering having opaque shield 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 to an observer standing anywhere on the beach.

- f. Replacement of pole lamps with low-profile, low-level luminaries <u>so that the light</u> <u>source or any reflective surface of the light fixture is not visible from the beach.</u> No higher than 48 inches off the ground such as low mounted wall fixtures, low bollards, and ground level fixtures, so that the light source or any reflective surface of the light fixture is not visible to an observer standing anywhere on the beach.
- g. Replacement of incandescent, fluorescent, and high intensity lighting with the lowest wattage low pressure sodium vapor lighting or other wildlife lighting possible for the specific application
- g. Planting or improvement of landscape vegetation <u>buffers</u> in compliance with the land development regulations between the light source and the beach to screen light from the beach.
- h.-i. Construction of ground-level barriers landward of the beach and frontal dune, in compliance with the land development regulations, to shield light sources from the beach. Ground-level barriers shall not interfere with marine turtle nesting or hatchling emergence, or cause short- or long-term damage to the beach system.
- i. j. Exterior lights used expressly for safety or security purposes shall be limited to the minimum number and configuration required to achieve their functional role(s) and shall conform to the measures set forth in this section in order to reduce or eliminate negative effects on sea turtles. 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.
- j.-k. Permanent removal of all floodlights, uplights, or spotlights used for decorative or accent purposes that are directly visible to an observer standing anywhere on the beach, or which indirectly or cumulatively illuminate the beach. This includes lighting of fountains, ponds, trees, landscaping and other purposes not related to human safety or security.
- <u>k</u>. <u>I.</u> Permanent removal or disabling of any fixture which cannot be brought into compliance with the provisions of these standards.
- <u>l.</u> m. Shielding or modification of any existing lighted sign pursuant to the land development regulations such that it is not directly visible to an observer standing anywhere on the beach.
- <u>m.-n</u>. Interior swimming pool and associated pool deck lighting, <u>lighting in parking</u> areas and roadways, beach accesses/dune crossovers, piers, and temporary lighting (flashlights) shall be turned off during sea turtle nesting season. If these lights cannot be turned off due to necessary nocturnal use, lights shall be amber or red LED lamps. Automatic timers are acceptable means of compliance with this standard.
- Sec. 14-64. Standards for interior artificial lighting.

To prevent interior artificial lighting from illuminating the jurisdictional boundaries or adjacent waters during the nesting season, measures such as, but not limited to the following, shall be taken to reduce or eliminate disorientation and other negative effects of new or existing interior light emanating from doors and windows:

- (1) Interior artificial lighting within direct line of sight of the beach shall be designed, positioned, modified, or removed so that:
  - a. The point source of light or any reflective surface of the light fixture is not <u>directly</u>, <u>indirectly</u>, <u>or cumulatively visible</u> to an observer standing anywhere on the beach.

b. The area within the jurisdictional boundaries is not directly or indirectly illuminated.

c. The area within the jurisdictional boundaries is not cumulatively illuminated.

- (2) Measures such as, but not limited to, the following shall be taken to reduce or eliminate the negative effects of new or existing interior beachfront lighting:
  - a. Use of window treatments such as blackout draperies, shade screens or blinds to shield interior lights from the beach.
  - b. Installation of new windows and glass doors which meet the standards for tinted glass or, for existing windows and glass doors, an application of window tint or film that meets the standards for tinted or filmed glass as defined in this chapter.
  - c. Turning off all unnecessary lights.
  - d. Arrangement of lamps and other moveable light fixtures away from windows.
  - e. Appropriate interior design to eliminate lighting which could <u>be directly, indirectly,</u> or cumulatively visible to an observer standing anywhere on the beach illuminate the nesting beach; and
  - f. For new construction within line of sight of the beach, tinted glass shall be installed on all windows and glass doors of single-story or multistory structures. This includes the seaward and shore-perpendicular sides of any structure.

Sec. 14-65. - Standards for mechanical beach cleaning.

All mechanical beach cleaning activities designed to remove debris from the beach or redistribute debris on the beach through the use of motorized vehicles or other mechanical means shall comply with the following standards:

- (1) *Timing.* Beach cleaning shall be confined to daylight hours during the nesting season.
- (2) *Mode of operations.* During the nesting season:
  - a. Beach cleaning operations shall be limited to the area seaward of the strand line (previous high tide mark).
  - b. Light-weight motorized vehicles having wide, low-profile, low-pressure tires, or hand raking shall be used to conduct beach cleaning operations.
  - c. Devices used for removing debris from the beach shall be designed and/or operated such that they do not penetrate beach substrate by more than two (2) inches.

- d. Operators shall be educated to identify a sea turtle crawl (turtle tracks), recognize and avoid a sea turtle nest, report nests and/or crawls to a permitted agent of the State.
- e. All excess raked material must be removed from the beach and disposed of properly or stored in an upland area as approved by the Director of Environmental Resources. With special approval from the Director of Environmental Resources and the State Department of Environmental Protection, limited quantities of organic material may be incorporated into the substrate in order to enhance the beach/berm system.
- (3) *Coordination of beach cleaning operations with State-sanctioned scientific studies.* All beach cleaning operations shall be coordinated through the State to ensure that these operations do not interfere with State-sanctioned scientific studies or surveys of sea turtle nesting activities.
- (4) *Authorization*. Any person performing mechanical beach cleaning must have a current permit from the Florida Department of Environmental Protection for the area being cleaned.

Sec. 14-66. - Protection from predation.

- (a) No predatory pets or pets likely to have a potential for being disruptive or damaging to nesting turtles, hatchlings, or nests shall be allowed to roam loose and unsupervised within the jurisdictional boundaries during the nesting season. Such pets include but are not limited to: dogs, cats, snakes, lizards or iguanas, ferrets and pigs.
- (b) Feeding of raccoons, opossums and other wild animals within jurisdictional boundaries is prohibited.

Sec. 14-67. - Penalty.

- (a) The City may enforce the provisions of this chapter by any lawful means including, but not limited to, in accordance with Section 1-7 of the Marathon Code, Chapter 10 of the Marathon Code, or Chapter 109, Article II of the Land Development Regulations. In addition, the City may notify the property owner or other person responsible for lighting or management of the property, in writing, that an external lighting source causing a violation may be removed by the City. The City shall recover from the property owner the costs of removal of external lighting sources causing violations, which costs shall constitute a lien against such equal in rank and dignity with the liens of all State, County, District, or Municipal taxes and special assessments. Except as otherwise provided by law, such lien shall be superior in dignity to all other prior liens, mortgages, titles, and claims, until paid.
- (b) Each property owner and, where applicable, his designee, agent, tenant, lessee, or assignee, shall each be responsible for adherence to the provisions of this chapter.

## Secs. 14-68 – Applicability

a) <u>An overlay district, known as the Sea Turtle Lighting District, is hereby established within</u> <u>the City of Marathon.</u>

- b) <u>The Sea Turtle Lighting District shall include all properties within the City of Marathon, that</u> <u>may produce artificial light directly, indirectly, or cumulatively visible from any portion of</u> <u>the beach, regardless of whether those properties are beachfront properties.</u>
- c) The provisions of this Ordinance apply to new and existing artificial lighting visible from the beach from all buildings and related infrastructure, including streetscapes, parking lots, outdoor areas, landscaping, as well as public parks and recreational areas and all other activities within the Sea Turtle Lighting District.

Secs. 14-<u>68</u> <u>69</u>—14-92. - Reserved.

## **Purpose of Proposed Amendment:**

The purpose of the amendment is to align City code with updated sea turtle lighting standards.

## ANALYSIS OF CODE OF ORDINANCES AMENDMENTS:

Each criteria and explanation of relevance to this proposed amendment are listed below:

## A. The need and justification for the change;

The need and justification for the change arises out of recent and ongoing changes in best management practices and legal challenges related to sea turtle lighting. Coordination with Florida Fish and Wildlife Conservation Commission (FWC) and local NGO's helped identify changes to the ordinance.

- **B.** The consistency of the proposed amendment with the Comprehensive Plan The proposed amendment is consistent with, and in furtherance of the following Comprehensive Plan Policies:
  - Policy 4-1.2.3 Promote Recovery of Federally Listed Species

The City shall work cooperatively with the US Fish and Wildlife Service (FWS) to protect and promote the recovery of plant and animal species designated by the Federal government as threatened and endangered. Related activities shall include:

- a. Continued technical assistance coordination consultation with the FWS; and
- b.
- Policy 4-1.3.1 Protect, Conserve and Enhance Coastal Resources, Wetlands, Water Resources, Living Marine Resources, Wildlife Habitats and Other Natural Resources and the Environmental Health of Florida Bay, the Atlantic Ocean and All Surface and Ground Waters
  - h. Preventing adverse impacts of lighting on coastal resources;

## Policy 4-1.11.7 Maximize Protection of Sea Turtles

The City shall adopt Land Development Regulations to maximize protection of sea turtles.

## Policy 4-1.11.8 Protect Sea Turtles From Land Development Activities

The City shall protect marine turtles from land development activities.

Policy 4-1.11.9
Turtle Nesting Habitat

Beaches recognized as nesting areas for marine turtles are those areas documented as such on the City's Threatened and Endangered Species Map.

# C. Whether the proposed change shall further the purposes of the LDRs and other City Codes, regulations and actions designed to implement the Comprehensive Plan.

The proposed amendment will further the purpose of the following City ordinances and regulations as they are designed to implement the Comprehensive Plan Policies above.

## Article III - Protection of Sea Turtles

The purpose of this article is to reduce the impacts of artificial coastal lighting on threatened and endangered sea turtles that nest on the beaches of Marathon by restricting artificial lighting and other activities that disorient nesting turtles and turtle hatchlings, causing the latter to crawl toward land rather than toward the ocean. This article is intended to provide overall improvements in nesting habitat degraded by light pollution, and increase successful nesting activity and production of hatchlings. The restrictions and constraints of this article shall be effective within the incorporated areas of Marathon and apply to any artificial lighting that has potential to adversely impact sea turtles within City limits.

## **CONCLUSION:**

The City of Marathon's Comprehensive Plan currently has several policies in place that directly and indirectly protect sea turtles and their habitat. The proposed amendments are consistent with these policies and will further strengthen protection within the City's limits by diminishing the effects of light pollution.

# **RECOMMENDATION:**

Staff believes that the proposed text amendments are consistent with the standards and tenants of Chapter 163 and 380 F.S., Rule 73C F.A.C., and the City's Comprehensive Plan adopted under the requirements of these statutes and rules.

Staff recommends approval of the proposed amendments to the Code of Ordinances.

Sponsored by: Garrett Introduction Date: June 13, 2023 Public Hearing Dates: June 13, 2023 July 11, 2023 Enactment date: July 11, 2023

## CITY OF MARATHON, FLORIDA ORDINANCE 2023-10

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MARATHON, FLORIDA, AMENDING CHAPTER 14 " ENVIRONMENT AND NATURAL **RESOURCES" ARTICLE 3 "PROTECTION OF SEA TURTLES", AMENDING** SECTION 14-61 "DEFINITIONS", AMENDING SECTION 14-63 "STANDARDS FOR **EXTERIOR ARTIFICIAL LIGHTING", AMENDING SECTION 14-64 " STANDARDS** LIGHTING", FOR INTERIOR ARTIFICIAL ADDING SECTION 14-68 "APPLICABILITY", AMENDING SECTIONS 14-68 THROUGH 14-92 "RESERVED"; OF THE CITY OF MARATHON CODE OF ORDINANCES; PROVIDING FOR THE **REPEAL OF ALL CODE PROVISIONS AND ORDINANCES INCONSISTENT WITH** THIS ORDINANCE; PROVIDING FOR SEVERABILITY; PROVIDING FOR **INCLUSION IN THE CODE.** 

WHEREAS, the City Council of the City of Marathon (the "City") deems it necessary to protect and conserve its marine resources, including federally listed endangered species such as sea turtles; and

**WHEREAS,** the City is dedicated to preventing adverse impacts of lighting on coastal resources and to maximize protection of sea turtles; and

**WHEREAS,** the City Council has adopted Comprehensive Plan Policies and Land Development Regulations to further these goals; and

WHEREAS, the current sea turtle protection ordinance, located in Chapter 14 Article 3 of the Code of Ordinance, City of Marathon, Florida (the "Marathon Code") has not been updated since 2012; and

**WHEREAS,** City staff has found a need for updating certain portions of the Code of Ordinances in order to maintain its effectiveness in furtherance of the Comprehensive Plan; and

**WHEREAS**, the City Council finds the adoption of the Amendment, in substantially the form attached hereto, is in the best interest of the City and complies with applicable State laws and rules.

# NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MARATHON, FLORIDA, THAT:

Section 1. The above recitals are true and correct and incorporated herein.

# NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MARATHON, FLORIDA, AS FOLLOWS:

### ARTICLE III. - PROTECTION OF SEA TURTLES

Sec. 14-61. - 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:

Adjacent waters means waters abutting a nesting area and extending 300 feet to either side of it, and out to either 300 yards offshore or the limits of the property line, whichever is further.

*Artificial light* or *artificial lighting* means any point source of light emanating from a bulb, lamp, filament or other manmade source within a fixture that emanates 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.

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*Beach berm* means a bare, sandy shoreline with a mound or ridge of unconsolidated sand that is immediately landward of, and usually parallel to, the shoreline and beach. The sand is calcareous material that is the remains of marine organisms such as corals, algae and mollusks. The berm may include forested, coastal ridges and may be colonized by hammock vegetation.

*Cumulatively* <u>visible</u>-illuminated means illuminated <u>light from</u>-by numerous artificial light sources that as a group illuminate <u>can be seen</u> any portion of the beach or dune system seaward of the crest of the primary dune or that are visible to <u>by</u> an observer standing anywhere on the beach.

Daylight hours means the locally effective time period between sunrise and sunset.

*Directly* illuminated <u>visible</u> means illuminated as a result of glowing elements, lamps, globes, or reflectors of an artificial light source that is visible <u>can be seen by</u> an observer standing anywhere on the beach.

*Disorientation* means the inability of hatchling or adult sea turtles to orient properly to the ocean.

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

*Full cut-off fixture* means 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; <u>a lighting fixture constructed in such a manner that no light emitted by the fixture, either directly from the lamp or a diffusing element or indirectly by reflection or refraction from any part of the luminaire, is projected at or above 90° as determined by photometric test or certified by the fixture manufacturer.</u>

## <u>Fully Shielded means a lighting fixture constructed in such a manner that the glowing</u> elements, lamps, globes, or reflectors of the fixture are completely covered by an opaque material to prevent them from being directly visible from the beach. Any structural part of the light fixture providing this shielding must be permanently affixed.

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

*Indirectly illuminated visible* means illuminated <u>light reflected from</u> as a result of the <u>a</u> glowing element, lamp, globe, or reflector of an artificial light source, which source is not directly visible <u>can be seen by</u>-to an observer <u>standing anywhere</u> on the beach.

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*Long wavelength* means the light with **wavelengths** <u>560 nm or</u> greater <u>and absent</u> <u>wavelengths below 560 nanometers</u> than 560 nm that emit light in the yellow to red color spectrum.

*Low-pressure sodium light* means an electric discharge lamp containing sodium, neon, and argon and that appears amber-yellow when lighted.

*Mechanical beach cleaning* means any mechanical means by which debris, including but not restricted to trash, litter, seaweed or seagrass wrack, is removed from the beach.

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*Nesting area, potential* means those areas identified in the City of Marathon's Comprehensive Plan map series as potential sea turtle nesting area.

*Nesting area, identified,* means any area where sea turtles have been or are currently nesting, and the adjacent beach or other intertidal areas used for access by the turtles.

Nesting area, potential, means any area where sea turtle crawls have been observed.

Nesting season means the period from April 15 through October 31 of each year.

*Permitted agent of the State* means any qualified individual, group or organization possessing a permit from the Department of Environmental Protection or by the Florida Fish and Wildlife Conservation Commission to conduct activities related to sea turtle protection and conservation.

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

*Recessed ceiling fixture* means the fixture recessed into the ceiling such that no portion of the lamp extends below the horizontal plane of the ceiling.

*Sea turtle* means any specimen belonging to the species Caretta caretta (loggerhead turtle), Chelonia mydas (green turtle), Dermochelys coriacea (leatherback turtle), Eretmochelys imbricata (hawksbill turtle) or any other marine turtle using City beaches as a nesting habitat.

## <u>Sea Turtle Lighting District shall include all properties within the City of Marathon,</u> <u>that may produce artificial light directly, indirectly, or cumulatively visible from any</u> portion of the beach, regardless of whether those properties are beachfront properties.

Sea turtle nesting season means the period from April 15 through October 31 of each year.

*Shield* means an opaque 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.

*Tinted glass* means any glass treated to achieve an industry-approved inside-to-outside light transmittal value of 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.

*Translucent fixture* means 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.

*Uplighting* means lighting fixtures that are directed upward, usually onto objects (flags, monuments, signs, buildings, landscape, etc.).

*Wildlife lighting* means artificial lighting <u>fixtures and bulbs</u> that minimizes the potential for negative affects to the nocturnal behaviors of nesting and hatchling sea turtles and other wildlife. The following criteria apply:

- (1) The light source is mounted as low to the ground or floor as practicable through the use of fixtures such as, low-mounted wall fixtures, low bollards, and ground-level fixtures;
- (2) The lumens emitted by the light source are the minimal required for the intended application;

- (3) 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;
- (4) The lamps emitting predominately long-wavelength light (>560 nm). These long wavelength light sources include low-pressure sodium vapor lamps, amber and red LEDs, true red neon lamps, and other lamps certified by the Florida Fish and Wildlife Conservation Commission as "wildlife lighting".

Window tinting means tinting or film that meets the standards for tinted glass.

Sec. 14-62. - Prohibition of activities disruptive to sea turtles.

- (a) *Prohibition of horseback riding, campfires, and vehicular traffic.* Horseback riding and campfires shall be prohibited on nesting areas during the nesting season. Vehicular traffic shall also be prohibited on nesting areas during the nesting season except for emergency and law enforcement vehicles, vehicles permitted on the beach for marine turtle conservation or research, or vehicles used for beach cleaning in compliance with Section 14-65, standards for mechanical beach cleaning.
- (b) *Prohibiting storage or placement of any material in the nesting area.* The storage or placement of any material, such as, but not limited to, construction material, rip-rap, trash and debris, mulch, beach wrack/seagrass, or other organic material, landscaping material, fill, vehicles, or boats, that has the potential to impede movement of hatchlings or adults between ocean and nesting areas, or that may cover existing nests or nesting sites is strictly prohibited.
- (c) *Development*. All development shall be set back a minimum of 50 feet from any area that serves as an active or potential nesting area for marine turtles. The 50-foot setback will be measured from the landward toe of the most landward beach berm or from 50 feet landward of mean high water (MHW), whichever results in the smaller total setback. The maximum total setback shall be 100 feet from MHW.
- (d) If any turtle nests or nesting activities have been reported within a portion of a beach, any temporary structures, including, but not limited to, beach chairs, umbrellas and cabanas which have the potential for entrapment of marine turtles and which may interfere with the use of the natural beach environment for nesting habitat shall be:
  - (1) Removed from the beach nightly; or
  - (2) Stored in areas designated by the City staff which are situated to avoid interference with marine turtles; or
  - (3) Placed in a manner so as to not obstruct the transit of turtle hatchlings to the water. Placement should include stacking in a staggered pattern at the landward edge of the beach.

Sec. 14-63. - Standards for exterior artificial lighting.

To prevent exterior artificial lighting from illuminating the jurisdictional boundaries or adjacent waters during the nesting season, the following measures shall be taken to reduce or eliminate disorientation and other negative effects of new or existing artificial lighting:

- (1) Exterior artificial light fixtures <u>directly</u>, <u>indirectly</u>, <u>or cumulatively visible from any</u> <u>portion</u> within direct line of sight of the beach shall be designed, positioned, modified, or removed so that:
  - a. <u>They are long wavelength, downward directed, full cutoff, fully shielded and</u> <u>mounted as close to the ground or finished floor surface as possible to achieve</u> <u>the required foot-candles</u>
- a. b. The point source of light or any reflective surface of the light fixture is not <u>directly</u>, <u>indirectly</u>, <u>or cumulatively</u> visible to an observer standing anywhere on the beach.

b. The area within the jurisdictional boundaries is not directly or indirectly illuminated.

- c. The area within the jurisdictional boundaries is not cumulatively illuminated.
- (2) Measures such as, but not limited to, the following shall be taken to reduce or eliminate the negative effects of new or existing artificial beachfront lighting:
  - a. Positioning of fixtures so that the point source of light or any reflective surface of the light fixture is eliminated or is no longer visible to an observer standing anywhere on the beach.
  - b. Replacement of fixtures having an exposed light source with fixtures containing recessed light sources or shields.
  - c. <u>Replace any light source, light bulb or lamp that is not long wavelength (e.g. incandescent, fluorescent, or high intensity lighting) with the lowest wattage long wavelength (e.g. LED or low pressure sodium) light source or lamp available for the specific application. Replacement of traditional lightbulbs with ling wavelengths lights, red, orange or amber LEDs, low pressure sodium vapor lamps, or other wildlife lighting.</u>
  - d. Replacement of nondirectional fixtures with completely shielded directional fixtures that point down and away from the beach.
  - e. <u>Provide shields for fixtures visible from the beach and not practical to</u> <u>immediately be replaced. Beachside shields are to cover 270 degrees and</u> <u>extend below the bottom edge of the fixture on the seaward side so that the</u> <u>light source or any reflective surface of the light fixture is not visible from</u> <u>the beach;</u>

e. Replacement of fixtures having transparent or translucent covering having opaque shield 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 to an observer standing anywhere on the beach.

- f. Replacement of pole lamps with low-profile, low-level luminaries <u>so that the light</u> <u>source or any reflective surface of the light fixture is not visible from the</u> <u>beach.</u> No higher than 48 inches off the ground such as low mounted wall fixtures, low bollards, and ground level fixtures, so that the light source or any reflective surface of the light fixture is not visible to an observer standing anywhere on the beach.
- g. Replacement of incandescent, fluorescent, and high intensity lighting with the lowest wattage low pressure sodium vapor lighting or other wildlife lighting possible for the specific application
- **<u>g</u>**. Planting or improvement of landscape vegetation <u>buffers</u> in compliance with the land development regulations between the light source and the beach to screen light from the beach.
- <u>h.-i.</u> Construction of ground-level barriers landward of the beach and frontal dune, in compliance with the land development regulations, to shield light sources from the beach. Ground-level barriers shall not interfere with marine turtle nesting or hatchling emergence, or cause short- or long-term damage to the beach system.
- <u>i.</u> <u>j.</u> Exterior lights used expressly for safety or security purposes shall be limited to the minimum number and configuration required to achieve their functional role(s) and shall conform to the measures set forth in this section in order to reduce or eliminate negative effects on sea turtles. 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.**
- **<u>j</u>.-k**. Permanent removal of all floodlights, uplights, or spotlights used for decorative or accent purposes that are directly visible to an observer standing anywhere on the beach, or which indirectly or cumulatively illuminate the beach. This includes lighting of fountains, ponds, trees, landscaping and other purposes not related to human safety or security.
- <u>k</u>. I.- Permanent removal or disabling of any fixture which cannot be brought into compliance with the provisions of these standards.
- <u>**l**</u>. <u>m</u>. Shielding or modification of any existing lighted sign pursuant to the land development regulations such that it is not directly visible to an observer standing anywhere on the beach.

- <u>m.-n.</u> Interior swimming pool and associated pool deck lighting, <u>lighting in parking</u> <u>areas and roadways, beach accesses/dune crossovers, piers, and temporary</u> <u>lighting (flashlights)</u> shall be turned off during sea turtle nesting season. If these lights cannot be turned off due to necessary nocturnal use, lights shall be amber or red LED lamps. Automatic timers are acceptable means of compliance with this standard.
- Sec. 14-64. Standards for interior artificial lighting.

To prevent interior artificial lighting from illuminating the jurisdictional boundaries or adjacent waters during the nesting season, measures such as, but not limited to the following, shall be taken to reduce or eliminate disorientation and other negative effects of new or existing interior light emanating from doors and windows:

- (1) Interior artificial lighting within direct line of sight of the beach shall be designed, positioned, modified, or removed so that:
  - a. The point source of light or any reflective surface of the light fixture is not **directly, indirectly, or cumulatively visible** to an observer standing anywhere on the beach.
  - b. The area within the jurisdictional boundaries is not directly or indirectly illuminated.
  - c. The area within the jurisdictional boundaries is not cumulatively illuminated.
- (2) Measures such as, but not limited to, the following shall be taken to reduce or eliminate the negative effects of new or existing interior beachfront lighting:
  - a. Use of window treatments such as blackout draperies, shade screens or blinds to shield interior lights from the beach.
  - b. Installation of new windows and glass doors which meet the standards for tinted glass or, for existing windows and glass doors, an application of window tint or film that meets the standards for tinted or filmed glass as defined in this chapter.
  - c. Turning off all unnecessary lights.
  - d. Arrangement of lamps and other moveable light fixtures away from windows.
  - e. Appropriate interior design to eliminate lighting which could <u>be directly</u>, <u>indirectly</u>, or cumulatively visible to an observer standing anywhere on the <u>beach</u> illuminate the nesting beach; and
  - f. For new construction within line of sight of the beach, tinted glass shall be installed on all windows and glass doors of single-story or multistory structures. This includes the seaward and shore-perpendicular sides of any structure.

Sec. 14-65. - Standards for mechanical beach cleaning.

All mechanical beach cleaning activities designed to remove debris from the beach or redistribute debris on the beach through the use of motorized vehicles or other mechanical means shall comply with the following standards:

- (1) *Timing*. Beach cleaning shall be confined to daylight hours during the nesting season.
- (2) *Mode of operations*. During the nesting season:
  - a. Beach cleaning operations shall be limited to the area seaward of the strand line (previous high tide mark).
  - b. Light-weight motorized vehicles having wide, low-profile, low-pressure tires, or hand raking shall be used to conduct beach cleaning operations.
  - c. Devices used for removing debris from the beach shall be designed and/or operated such that they do not penetrate beach substrate by more than two (2) inches.
  - d. Operators shall be educated to identify a sea turtle crawl (turtle tracks), recognize and avoid a sea turtle nest, report nests and/or crawls to a permitted agent of the State.
  - e. All excess raked material must be removed from the beach and disposed of properly or stored in an upland area as approved by the Director of Environmental Resources. With special approval from the Director of Environmental Resources and the State Department of Environmental Protection, limited quantities of organic material may be incorporated into the substrate in order to enhance the beach/berm system.
- (3) Coordination of beach cleaning operations with State-sanctioned scientific studies. All beach cleaning operations shall be coordinated through the State to ensure that these operations do not interfere with State-sanctioned scientific studies or surveys of sea turtle nesting activities.
- (4) *Authorization*. Any person performing mechanical beach cleaning must have a current permit from the Florida Department of Environmental Protection for the area being cleaned.

Sec. 14-66. - Protection from predation.

- (a) No predatory pets or pets likely to have a potential for being disruptive or damaging to nesting turtles, hatchlings, or nests shall be allowed to roam loose and unsupervised within the jurisdictional boundaries during the nesting season. Such pets include but are not limited to: dogs, cats, snakes, lizards or iguanas, ferrets and pigs.
- (b) Feeding of raccoons, opossums and other wild animals within the jurisdictional boundaries is prohibited.

Sec. 14-67. - Penalty.

- (a) The City may enforce the provisions of this chapter by any lawful means including, but not limited to, in accordance with Section 1-7 of the Marathon Code, Chapter 10 of the Marathon Code, or Chapter 109, Article II of the Land Development Regulations. In addition, the City may notify the property owner or other person responsible for lighting or management of the property, in writing, that an external lighting source causing a violation may be removed by the City. The City shall recover from the property owner the costs of removal of external lighting sources causing violations, which costs shall constitute a lien against such equal in rank and dignity with the liens of all State, County, District, or Municipal taxes and special assessments. Except as otherwise provided by law, such lien shall be superior in dignity to all other prior liens, mortgages, titles, and claims, until paid.
- (b) Each property owner and, where applicable, his designee, agent, tenant, lessee, or assignee, shall each be responsible for adherence to the provisions of this chapter.

## Secs. 14-68 – Applicability

- a) <u>An overlay district, known as the Sea Turtle Lighting District, is hereby established</u> within the City of Marathon.
- b) <u>The Sea Turtle Lighting District shall include all properties within the City of</u> <u>Marathon, that may produce artificial light directly, indirectly, or cumulatively visible</u> <u>from any portion of the beach, regardless of whether those properties are beachfront</u> <u>properties.</u>
- c) <u>The provisions of this Ordinance apply to new and existing artificial lighting visible</u> from the beach from all buildings and related infrastructure, including streetscapes, parking lots, outdoor areas, landscaping, as well as public parks and recreational areas and all other activities within the Sea Turtle Lighting District.

Secs. 14-68 69-14-92. - Reserved.

**SECTION 2.** The Provisions of the Code of Ordinances, City of Marathon, Florida and all Ordinances or parts of Ordinances in conflict with the provisions of this Ordinance are hereby repealed.

**SECTION3 3.** The provisions of this Ordinance are declared to be severable, and if any sentence, section, clause or phrase of this Ordinance shall, for any reason, be held to be invalid or unconstitutional, such decision shall not affect the validity of the remaining sentences, sections, clauses or phrases of the Ordinance, but they shall remain in effect it being the legislative intent that this Ordinance shall stand notwithstanding the invalidity of any part.

**SECTION 4.** It is the intention of the City Council, and it is hereby ordained the provisions of this Ordinance shall become and be made part of the Marathon Code, that sections of this Ordinance may be renumbered or re-lettered to accomplish such intentions, and that the word "Ordinance" shall be changed to "Section" or other appropriate word.

**SECTION 5.** This Ordinance shall be effective immediately upon approval by the State Department of Economic Opportunity pursuant to Chapter 380, Florida Statutes.

# PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF MARATHON, FLORIDA, THIS X<sup>th</sup> DAY OF X, 2023.

THE CITY OF MARATHON, FLORIDA

Luis Gonzalez, Mayor

AYES: NOES: ABSENT: ABSTAIN:

ATTEST:

Diane Clavier, City Clerk

(City Seal)

## APPROVED AS TO FORM AND LEGAL SUFFICIENCY FOR THE USE AND RELIANCE OF THE CITY OF MARATHON, FLORIDA ONLY:

Steven Williams, City Attorney