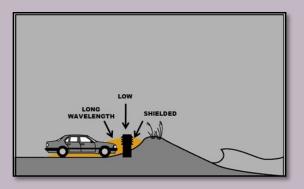
# Acceptable Fixtures, Bulbs and Other Light Sources:

- Keep it LOW mount the fixture as low as possible to minimize light trespass, and use the lowest amount of light needed for the task
- Keep it SHIELDED fully shield the light so bulbs and/or glowing lenses are not visible to minimize light trespass (downward directed)
- Keep it LONG use long wavelength light sources (ambers and reds) in the appropriate lighting fixtures



# **Acceptable Bulbs**

- \*Low Pressure Sodium (LPS) 18w, 35w
- \* Red, orange or amber LED (true red, orange or amber diodes, NOT filters) or True red neon
- \* Other lighting sources that produce light of 560 nm or longer







## The Following Lights are Not Allowed

Private balcony lights, Up lights, Tree-strapped downlights, Decorative lighting not necessary for human safety or security, Pond lights, Dune walkover lighting, Fountain lights on beach, shoreline or perpendicular side of structure

## **Marine Turtles are Protected by Law:**

- Federal Endangered Species Act
- Florida Statute 379.2431 the Marine Turtle Protection Act
- Charlotte County Sea Turtle Protection Ordinance No. 98-41

# Report Violations, Dead, Disoriented, Or Injured Turtles:

Contact the Florida Fish and Wildlife Conservation Commission (FWC) at: 888-404-FWCC (3922)
\*FWC or #FWC

Tip@My FWC.com (text)
https://myfwc.com/contact/wildlife-alert/

#### More Information on Sea Turtles:

Mote Marine Laboratory
1600 Thompson Parkway
Sarasota, FL 34236
<a href="https://mote.org/research/program/seaturtle-conservation-research">https://mote.org/research/program/seaturtle-conservation-research</a>

Sea Turtle Conservancy
4581NW 6th St Suite A
Gainesville, FL 32609
<a href="https://conserveturtles.org/beachfront-lighting-education-outreach-materials/">https://conserveturtles.org/beachfront-lighting-education-outreach-materials/</a>

Florida Fish and Wildlife Conservation
Commission
Farris Bryant Building
620 S Meridian St
Tallahassee, FL 32399
<a href="https://myfwc.com/wildlifehabitats/wildlife/sea-turtle/beach-activities/">https://myfwc.com/wildlifehabitats/wildlife/sea-turtle/beach-activities/</a>

### If you have any questions please contact:

Charlotte County Parks and Natural Resources
1120 Centennial Blvd
Port Charlotte, FL 33953
941-613-3220

# Sea Turtles and Coastal Development



\*\*May 1st through October 31st is Sea Turtle nesting and hatching season. \*\*

Sea turtles hatch from their nests in the cool of the night when their chances of survival are at their highest. They are dependent on the natural light of the moon on the horizon to direct them to the water's edge. It's crucial that they get there to beat the odds of only 1 in 1000 hatchlings surviving to adulthood. In the presence of artificial lighting hatchlings become disoriented prolonging their journey to the Gulf of Mexico. Light pollution misdirects hatchlings away from the water into potentially life threatening environments like parking lots and traffic and lengthens their exposure to predators and the heat of Florida. We have an important role in ensuring the reproductive success of nesting sea turtles on our beaches. The enclosed information is a guick guide to making beach front development more sea turtle friendly.



# **Decreasing Light Pollution**

**New development** must adhere to a coastal lighting review and inspections. Permits need to show that the following requirements are being met.

Any light potentially visible from the beach needs to be a FWC approved lighting fixture. This means Fully Shielded, Downward Directed, and Fitted with approved red or amber bulbs.

Tinted glass or film with a visible light transmittance value of 0.45 (45%) or less shall be applied to all windows and doors within line of sight of the beach. This includes the seaward and shore-perpendicular sides of the structure. The best option for minimizing lighting impacts to sea turtles is 15% transmittance; therefore, higher transmittance tints often requires installation of additional window treatment to achieve full compliance.

**Existing development** may need to bring lighting fixtures or windows up to code.

### **Exterior Lighting**

Turn off all unnecessary lights.

Reposition and/or shield lights so that they are no longer visible from the beach.

Replace existing lights with sea turtle friendly fixtures and light bulbs.

## **Interior Lighting**

Remove interior light fixtures away from windows.

Use block out window treatments from sunset to sunrise.

Replace windows or add aftermarket window tint to glass to meet current visual transmittance standards (45% or less).

Coastal Lighting Night Inspections are conducted to investigate sea turtle disorientations caused by artificial lighting, to notify homeowners of lighting violations, and to bring existing lighting violations up to code.

# Mitigate Effects of Construction on Nesting Habitat

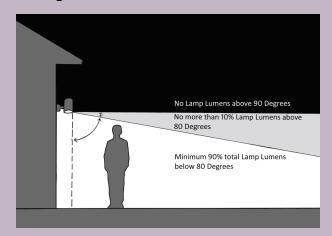
Florida Department of Environmental Protection (FDEP) permitting is required for development seaward of the established Coastal Construction Control Line (CCCL). This permit adds requirements and mitigates any adverse impacts on sea turtles and their nesting habitats.

What is a CCCL? It's a line established by the FDEP that is used to regulate construction activities for the protection of the beach and dune systems.

Most FDEP permits require that construction be conducted outside of sea turtle nesting season (Nov. 1-April 31). In rare circumstances that construction is allowed during nesting season (May 1-Oct. 31) the following are required:

- Use of silt fence barrier to prevent sea turtles from entering the construction site
- All lighting must meet sea turtle code
- Daily monitoring for nesting activities must be completed by a FWC approved sea turtle permit holder prior to construction.

Please see Charlotte County Sea Turtle Protection Code Article XII. 3-5-296 through 304 for additional information.



# **FWC Approved Sea Turtle Lighting**

All exterior fixtures on the seaward and the shore perpendicular sides of the building (and on the landward side of the building if they are visible from the beach) should be well shielded, full cut-off, downward directed type fixtures with approved bulbs. See FWC Sea Turtle Lighting Guidelines: <a href="https://myfwc.com/media/18510/updated-2018-fwc-sea-turtle-lighting-guidelinesdoc.pdf">https://myfwc.com/media/18510/updated-2018-fwc-sea-turtle-lighting-guidelinesdoc.pdf</a>



Other FWC Approved Lighting may be found at: <a href="http://myfwc.com/conservation/you-conserve/lighting/certified/">http://myfwc.com/conservation/you-conserve/lighting/certified/</a>