



## **Environmental Advisory Committee**

4:00 p.m., Thursday, October 17, 2024

Council Chambers

1207 Palm Boulevard, Isle of Palms, SC 29451

### **Agenda**

1. **Call to order** and acknowledgment that the press and the public have been duly notified of the meeting in accordance with the Freedom of Information Act
2. **Citizen's Comments**
3. **Approval of previous meeting's minutes – September 12, 2024**
4. **Old Business**
  - i. Wildlife
  - ii. Litter- discussion of Kiawah beach trash program
  - iii. Water Quality- update on water quality testing program  
update on City engaging Federal lobbyist
  - iv. Climate Action
6. **New Business**
  - i. Discussion of light pollution and exterior lighting ordinance
  - ii. Update on draft Sea Level Rise Adaptation
7. **Miscellaneous Business**

Next meeting date: 4:00 p.m., Thursday, November 14, 2024
8. **Adjournment**



## ENVIRONMENTAL ADVISORY COMMITTEE

4:00pm, Thursday, September 12, 2024

1207 Palm Boulevard, Isle of Palms, SC

and broadcasted live on YouTube: <https://www.youtube.com/user/cityofisleofpalms>

### MINUTES

1. **Call to order**

Present: Sandra Brotherton, Mary Pringle, Todd Murphy, Laura Lovins, Doug Hatler, Lucia Spiotta, Belvin Olasov, Council Member Miars

Absent: Dane Buckout

Staff Present: Director Kerr, Zoning Administrator Simms, Asst. Director Asero

2. **Citizen's Comments -- none**

3. **Approval of previous meeting's minutes**

**MOTION: Ms. Lovins made a motion to approve the minutes of the July 11, 2024 meeting, and Mr. Murphy seconded the motion. The motion passed unanimously.**

4. **Presentation**

**Beach Trash Can Pilot Study – Susan Smith**

Director Kerr reminded the Committee that the City's current contract for beach trash can pickup will end next September. The City asked Susan Smith to track trash on the beach when the cans are on the beach and when they are placed roadside.

Ms. Smith shared her data collecting process over a two-week period at 25<sup>th</sup> Avenue. She said there was a negligible difference in the amount of trash on the beach whether the cans were on the beach or roadside.

The Committee discussed the aesthetics of the trashcans on the beach, with a few members noting how it looked nice without the cans. Ms. Smith and Dr. Brotherton both received feedback from citizens who were upset the cans had been removed from the beach.

The Committee continued to discuss a variety of options and possibilities for trash containers and trash removal from the beach. Director Kerr said there is some time to come up with a solution.

**MOTION: Dr. Brotherton made a motion to reorder the agenda to speak about Water Quality followed by Litter and then Wildlife. Mr. Hatler seconded the motion. The motion passed unanimously.**

**5. Old Business**

**A. Water Quality**

Mr. Hatler reported he will be sending pictures of the outfalls to GEL this week. Once the sample locations are selected, GEL will take the water samples. He hopes this will be before the end of the year. Samples must be taken after it rains.

**B. Litter**

Dr. Brotherton shared information she collected about beach trashcans from other beach communities. She said the City may need to have different alternatives for different areas of the beach. She also said this change creates an opportunity for the City to find more aesthetically pleasing options for trash receptacles. She added her big takeaway from her research is the need for buy-in from the community.

Director Kerr said that he and Asst. Director Asero will reach out to Kiawah Island and their vendor, Trident, about their trash pickup service. Asst. Director Asero will also provide to the Committee a list of the most heavily used beach accesses.

**C. Wildlife**

Ms. Pringle mentioned the email she shared with Committee members earlier regarding a talk about native plants being held on October 10.

She reported that there were 56 turtle nests this season with an approximately 90% hatch rate. Two nests remain unhatched to date. The Purple Martin gourds at the Native Plant garden were a big success this season.

**D. Climate Action**

Mr. Olasov reported that Charleston County passed their Climate Action Plan. The work will begin when a new coordinator is hired.

**6. New Business**

**A. Update on EAC table at the IOP Farmers Market**

Ms. Lovins said that many of the food composting buckets have been given out. They are now distributing native plant seeds to those who visit the table.

**B. Update on the installation of compost liner dispensers at compost drop-off locations**

Asst. Director Asero said the compost liners have been installed at the Carmen R. Bunch Park and the Marina.

**6. Miscellaneous Business**

Ms. Lovins said she met with Chris Jordan, the General Manager of the IOP Water & Sewer Commission, Ryne Phillips from Seamon Whiteside, and Roger Gwynne, a Federal-level

environmental lobbyist from the Ferguson Group. Director Kerr said the City has a state-level lobbyist they are pleased with. They have discussed the possibility of sharing the expense of a Federal-level lobbyist with the Water & Sewer Commission. The City would need to complete an RFP process before moving forward. He shared the recent success of the Water & Sewer Commission in securing Federal-level grants.

**7. Adjournment**

The next meeting of the Environmental Advisory Committee is scheduled for Thursday, October 17, 2024 at 4pm.

Mr. Olasov made a motion to adjourn, and Ms. Lovins seconded the motion. The meeting was adjourned at 5:24pm.

Respectfully submitted,

Nicole DeNeane  
City Clerk

# Folly Beach Installing New “Turtle-Friendly” Streetlights

The amber hue of these new light fixtures can help to ensure that turtle hatchlings make their way safely to the water.

By

[Meghan Overdeep](#)

Updated on November 6, 2023

New specialty lights are being installed along the beachfront in [Folly Beach, South Carolina](#), to help keep both turtles and people safe at night.

This week Dominion Energy crews began installing 37 “turtle lights” along the iconic beachfront, with the majority located on East Arctic and East Ashley Avenues.

These turtle-friendly lights will replace existing LED lighting and “strike a balance between the safety residents expect from street lighting, while reducing the potential impact artificial lighting can have on turtle hatchlings,” a representative for Dominion Energy said in a statement.

Amber in color, these new lights operate on a more narrow wavelength than traditional street lighting. Darkness is essential for [sea turtle hatchlings](#), as they are instinctively drawn from their nests toward the ocean by moonlight. This vital step in the hatching process can be disrupted by artificial lighting, which can confuse and disorient the turtles, calling them to the dunes or the road, rather than the ocean. The special hue of these new light fixtures can help to ensure that turtle hatchlings make their way safely to the water.

A spokesperson for the City of Folly Beach told *Southern Living* that the Folly Beach Public Works Department and Dominion Energy started working on this plan years ago. It was finally approved by the City Council in July 2023.

"Today we're witnessing the culmination of safety for people and wildlife," Folly Beach's Mayor Tim Goodwin told [WCIV](#) Wednesday.

Installation will continue for the next several months and should be completed well before the start of the 2024 turtle nesting season.

"Projects and partnerships like this are win-win for residents and our communities, providing a long-term, innovative lighting solution to benefit our coastal environment for years to come," the Dominion Energy representative said. "The biggest winners are the sea turtles!"

## **§ 166.10 EXTERIOR LIGHTING.**

### **§ 166.10-01 Purpose.**

The purpose of this section is to control light spillage and glare so as not to adversely affect motorists, pedestrians, natural areas, vistas, and land uses of adjacent properties. More specifically, this section is intended to:

- (A) Control lighting to assure that excessive light spillage and glare are not directed at adjacent properties, neighboring areas, and motorists;
- (B) Ensure that all site lighting is designed and installed to maintain adequate lighting levels on site;
- (C) Provide security for persons and land; and
- (D) Avoid negative impacts to wildlife from exterior lighting.

(Ord. 05-10, passed 3-23-10; Am. Ord. 06-19, passed 4-9-19)

### **§ 166.10-02 Applicability.**

(A) *General.* Unless exempted in accordance with § 166.10-03, Exemptions, the provisions of this section apply to all zoning districts within the city.

(B) *Time of compliance.* A lighting plan shall be submitted with an application for a site plan, § 162.03-06; preliminary subdivision plat, § 162.03-07(D); or zoning permit, § 162.03-13, whichever is appropriate.

(Ord. 05-10, passed 3-23-10)

### **§ 166.10-03 Exemptions.**

The standards of this section shall not apply to city-owned, operated, or maintained street lights located within a street right-of-way or other easement granted to the city.

(Ord. 05-10, passed 3-23-10)

### **§ 166.10-04 Design Standards For Exterior Lighting.**

All exterior lighting shall conform to the following standards:

(A) *Maximum lighting height.*

- (1) Except for outdoor sports fields or performance areas, outdoor lighting heights shall be no greater than:
  - (a) Eighteen feet above grade for pedestrian lighting; and

(b) Thirty feet above grade for vehicular lighting.

(2) Wherever possible, illumination of outdoor seating areas, building entrances, and walkways shall be accomplished by use of ground-mounted fixtures not more than four feet in height.

(B) *Illumination direction.*

(1) In all districts, lighting of nonresidential development shall be directed downward. In addition, upwardly-directed lighting shall not be used to illuminate structures, except for low-wattage architectural lighting.

(2) Outdoor lighting shall not shine directly into the yard or windows of adjacent residential uses.

(3) Outdoor lighting on residential or commercial structures facing the Folly River must be shielded so that light is directed downward and does not shine directly onto the river.

(C) *Location.* All lighting shall be located at least ten feet from side lot lines, rear lot lines, or required perimeter buffers.

(D) *Shielding.*

(1) Light fixtures in excess of 60 watts or 100 lumens shall use full cut-off lenses or hoods to prevent glare or spillover from the project site onto adjacent lands and streets.

(2) No interior light source shall be positioned, aimed, or configured so as to result in the light source being visible from land occupied by existing residential development.

(3) No light source in a canopy structure shall extend downward further than the lowest edge of the canopy ceiling.

(4) Awnings or canopies used for building accents over doors, windows, etc., shall not be internally illuminated (i.e., from underneath or behind the awning).

(E) *Maximum light levels.* All outdoor lighting shall be designed and located such that the maximum illumination measured in foot candles at the property line shall not exceed one foot candle. The average intensity illumination for outdoor lighting shall not exceed four foot candles in intensity as measured at grade. Vehicular use area lighting shall not exceed a maintained average of two-and-one-half foot candles.

(F) *Uniformity ratios.*

(1) In order to maintain uniformity in light levels across a development, and prevent or minimize dark areas, the ratio of maximum to minimum lighting levels on a given site or parcel of land as measured in foot candles at ground level, shall not exceed 15:1 in the residential districts or 10:1 in the nonresidential districts. Parking lots shall maintain the same uniformity ratios as the principal use they serve. In the cases of mixed uses, the uniformity ratios for nonresidential districts shall apply.

(2) The quantity of fixtures to be provided shall be based upon the desired level of uniform illumination as established by the current standards of the Illuminating Engineering Society of North America (IESNA).

(G) *Hue*. All outdoor and parking lot lighting fixtures, including: metal halide, mercury vapor, fluorescent, induction, white high-pressure sodium and color-improved high-pressure sodium lamps used in non-cutoff fixtures shall be coated with an internal white frosting inside the outer lamp envelope.

(H) *Additional standards in beachfront areas*. For purposes of protecting nesting sea turtle habitat, the following standards shall apply to all uses on lots adjacent to the beachfront;

- (1) The source of illumination shall not be directly visible from the beach.
- (2) Exterior lighting within sight of the beach shall be a maximum of 50 watts and designed with recessed fixtures.
- (3) Low-intensity lighting set on a base no higher than 48 inches off of the ground shall be utilized in parking lots.

(4) Parking lots shall be sited so as to minimize headlight glare directed on the beach, or shall incorporate ground-level barriers to mitigate the effects of headlights on beach areas.

(Ord. 05-10, passed 3-23-10; Am. Ord. 06-19, passed 4-9-19)

#### **§ 166.10-05 Wall-Mounted Lights.**

Wall-mounted lights shall be fully shielded luminaries (such as shoebox or can style fixtures) to prevent the light source from being visible from any adjacent residential property or public street right-of-way. Nothing in this subsection shall prevent the use of sconces or other decorative lighting fixtures provided that the source of illumination is not visible from adjacent lands used or zoned for residential purposes, and provided that the maximum illumination values comply with the standards in § 166.10-04(E), Maximum Light Levels.

(Ord. 05-10, passed 3-23-10)

#### **§ 166.10-06 Floodlights and Spotlights.**

Floodlights and spotlights shall be selected, located, aimed, and shielded so that direct illumination is focused exclusively on a portion of the building facade or other intended site feature and away from adjoining lands or the right-of-way. On-site lighting may be used to accent architectural elements but shall not be used to illuminate entire portions of building(s). Such lighting shall be installed in a fixture that is shielded so that no portion of the light bulb extends below the bottom edge or above the top edge of the shield, and the main beam from the light source is not visible from adjacent lands of the adjacent right-of-way. Floodlights or other type of lighting attached to light poles that illuminate the site or building(s) are prohibited.

(Ord. 05-10, passed 3-23-10)

#### **§ 166.10-07 Wall Pack Lights.**

Wall packs on buildings may be used at entrances to a building to light unsafe areas. They are not intended to draw attention to the building or provide general building or site lighting. Wall packs on the exterior of the building shall be fully shielded (true cut-off type bulb or light source not visible from off-site) to direct the light downward and be of low wattage (preferably 100 watts or lower). Other accent lighting projected onto buildings may be allowed provided that it is approved through the development plan process.



(Ord. 05-10, passed 3-23-10)

**§ 166.10-08 Illumination of Outdoor Sports Fields and Performance Areas.**

All lighting fixtures serving outdoor sports fields and performance areas shall be equipped with a glare control package (e.g., louvers, shields, or similar devices), and the fixtures shall be aimed so that their beams are directed and fall within the primary playing or performance area.

(Ord. 05-10, passed 3-23-10)

**§ 166.10-09 Sign Lighting.**

Lighting fixtures illuminating signs shall comply with the standards of this section, and such fixtures shall be aimed and shielded so that direct illumination is focused exclusively on the sign face.

(Ord. 05-10, passed 3-23-10)

## LED streetlights

New, more efficient light bulbs have been used by homeowners for many years as a way to save energy and reduce electric bills. Power companies are doing the same with streetlights.

In Georgetown County, Santee Cooper started replacing low-pressure sodium street lights in my community, Heritage Plantation on Pawleys Island.

It started on an as-needed basis; when high-pressure sodium lights failed, they would be replaced with high-intensity LED lights.

That soon generated complaints by residents in the community because the new lights were so bright.

It also generated concerns with the homeowners association because converting to LED lights costs property owners more money, even though the new lights use less electricity.

Several homeowners investigated the new LED lights both from a cost perspective as well as their excessive brightness.

In the process, they discovered that the bright lights were contrary to the American Medical Association recommendations.

They had a rating of 4,000 Kelvin, which is in the blue spectrum, and an intensity of 6,000 lumens, which is very bright.

Among the things they learned from AMA is that excessive blue light affects melatonin, and that leads to a number of health issues in humans as well as animals.

The intense brightness of the new LEDs affects the human eye, which increases glare to the point that nighttime vision is reduced. This decrease in visual acuity raised safety concerns about night driving.

Eventually, Heritage Plantation persuaded Santee Cooper to reduce the brightness of the LEDs from 6,000 to 2,500 lumens and, more important, to reduce the color temperature from 4,000 to 3,000 Kelvin.

While this is a pilot project for Santee Cooper, the changes in my community have been dramatic.

I would encourage all communities to accept only the low-intensity LEDs when they need new streetlights.

PETER EISENBERG  
*Pawleys Island*