



ENVIRONMENTAL ADVISORY COMMITTEE

4:00pm, Thursday, February 13, 2025

1207 Palm Boulevard, Isle of Palms, SC

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

MINUTES

1. Call to order

Present: Laura Lovins, Lucia Spiotta, Mary Pringle, Eric Cicora, Cindy Marrs, Sean Popson

Absent: Dane Buckout, Todd Murphy, Council Member Miars

Staff Present: Director Kerr, Zoning Administrator Simms

2. Citizen's Comments -- none

3. Approval of previous meeting's minutes

MOTION: Ms. Popson made a motion to approve the minutes of the January 9, 2025 meeting, and Ms. Marrs seconded the motion. The motion passed unanimously.

4. Presentations – Susan Hill Smith, regarding public dock interpretive signs

Susan Smith's presentation is attached to these minutes.

Ms. Smith said she presented this to the Public Services & Facilities Committee on Tuesday. She said she would like to use the surrounding walkway to affix some of the signs. Ms. Popson expressed concern that the signs will deteriorate over time. Ms. Smith will seek the advice of DNR about weather-worthy signage.

Director Kerr suggested firming up the pricing for the signs and their installation as well as a layout of sign locations. Ms. Smith will speak to potential sponsoring agencies for funding, and should there still be a need for additional funding, she will bring the request to City Council. Ms. Smith and Ms. Lovins will work on the signage, layout, and potential funding sources.

5. Old Business

A. Wildlife

Ms. Pringle reported that the native plant garden has been cut back. She transplanted some plants from her yard to the garden. Another gourd rack has been installed. Ms. Pringle reported there have been over 500 sightings of purple martins so far as close as Awendaw.

Ms. Pringle submitted an article to the Island Eye about the rehabilitation of a recently found cold-stunned green turtle.

B. Litter

Ms. Smith's report on fireworks alternatives is attached to these minutes. Discussion ensued as to how the City's current fireworks vendor could alter their show to something that could have less environmental impact including shortening the length of the show and selecting fireworks that produce less trash. Committee members also discussed the ways in which nesting areas on the beach could be better protected during the holiday. Director Kerr will speak with the fireworks vendor and tell him to eliminate "cake barrages" from the show and get a time estimate for the show. Further discussion will take place at the next meeting.

Ms. Smith's annual report on the IOP Cleanup Crew is attached to these minutes.

Zoning Administrator Simms said that he has reviewed information on Folly Beach's lighting ordinances and will have more to report next month.

Ms. Lovins said she would like to discuss the hybrid plan for beach litter cleanup on the March agenda. Director Kerr said Asst. Director Asero is meeting with contractors and getting pricing.

C. Water Quality

Director Kerr said that Zoning Administrator Simms spoke with GEL who said they are unable to interpret the water quality data based on regulatory agency benchmarks and concerns. He will continue to work on finding a way to interpret the data for future use.

Director Kerr said the selection for a Federal-level lobbyist has been narrowed to two firms, both of which will make presentations to the Administration Committee in March. He expects they will begin their work in July at the start of the new budget year.

D. Climate Action

Director Kerr shared that the USACE anticipates sand being pumped onto the Isle of Palms in the next few weeks. The process is expected to take about 6 months, which will be in the midst of turtle nesting season. Ms. Pringle asked about a meeting that was to take place with the City, the Turtle Team, and DNR about protecting the turtles during this time. Director Kerr said he would look into it.

The Sea Level Rise Adaptation Plan will be presented to City Council at their March 11 workshop.

6. New Business

Discussion of forthcoming Community Enrichment Task Force recommendations

Director Kerr briefly explained the work of the Community Enrichment Task Force that recently culminated in a series of goals and recommendations in four areas: Environmental, Public Safety, Quality of Life, and Seasonal Impacts: Parking & Traffic. He believes that all of the environmentally-related recommendations will come to this committee for further discussion and

possible implementation. Once the link to the recommendations becomes available, Director Kerr will send it to Committee members.

7. **Miscellaneous Business**

8. **Adjournment**

The next meeting of the Environmental Advisory Committee is scheduled for Thursday, March 13, 2025 at 4pm.

Ms. Popson made a motion to adjourn, and Ms. Marrs seconded the motion. The meeting was adjourned at 5:22pm.

Respectfully submitted,

Nicole DeNeane
City Clerk

Fireworks Update - Feb 13, 2025 EAC Meeting

Presented by Susan Hill Smith, Isle of Palms Cleanup Crew Cofounder

Bottom Line on How We Can Reduce Environmental Impact

Other available alternatives to July 4th fireworks shows don't seem viable at this time:

- **Drone shows** - in windy coastal environments currently appear to pose a greater risk for injuries and cancellations than firework shows - see further details from Folly Beach on page 2. Plus, drone shows are currently more expensive than fireworks when looking at costs for shows of the same length.
- **Laser shows** - evidently require a backdrop for the display than the ocean & empty sky cannot easily provide.
- **No-debris fireworks** - are much more expensive and apparently don't have the same range for viewing. They are typically used when people need to be close to the show displays (cruises & stadium events). Even though they burn up more completely, no-debris fireworks involve more plastic materials than the fireworks shells used by the City of Isle of Palms' fireworks contractor, Munnerlyn Pyrotechnics, according owner Brent Munnerlyn.

But there appears to be an easy opportunity that could significantly reduce the plastic debris and some smoke caused by the show on Isle of Palms, starting this summer.

- In addition to fireworks shells, the IOP's July 4th show include "cake barrages" - rapid fire sequences of smaller fireworks typically seen at lower levels.
- Most of the plastic debris and lower-level smoke generated from the IOP show comes from including a lot of cake barrages, according to Munnerlyn, who says IOP's former fire chief liked and requested them.
- Cake barrages are fun but not essential to a good show, and it's not unusual for a coastal community to go without them. Munnerlyn told me he agrees with removing them for environmental reasons and as a result of our discussion plans to remove them from other coastal shows that his company does.
- Other than cake barrages, Munnerlyn says the fireworks shells that his company uses are almost all biodegradable, with the exception of the "quick match" - a roughly 2-foot-long fuse that ignites the shell. For safety reasons, he said, that needs to be plastic, but most of the quick match burns up, so it generates only a small amount of debris.

There are other concerns related to fireworks that this does not address:

- Impact of noise and light on wildlife & pets
- Residue of fireworks/explosives left in the air, ocean and beach
- Cost of show - \$40,000 + staff overtime

- Stretching staff on what is already the busiest beach day/week of the year
- Late-night traffic gridlock, event management & public safety issues

However, removing fireworks without some kind of replacement could be a difficult/ divisive conversation for the community and is at risk of being shot down by City Council.

The only other alternative that I can think of would be in staging a July 4th event - maybe at the Rec - geared toward residents. This could be during the daytime & tied to the longstanding golf cart parade - or a small-scale fireworks display at night with no-debris fireworks (if that's even possible in that space). But making either of those switches would come with challenges, planning demands, etc. and might not be embraced by the community.

Also, a likely valid line of thinking is that by providing a professional fireworks display, less people are likely to set off fireworks on their own, which is illegal on the island but happens anyway, impacting neighbors and creating safety issues.

Details from the Folly Beach drone show

- I spoke directly with Kelly Travers, Folly Association of Businesses (FAB) event coordinator & the point person for the attempted New Year's Eve drone show.
- With their Town Council approval, FAB organizes and pays for Folly's fireworks shows on July 4th & Dec. 31.
- On behalf of FAB, Travers researched alternatives to fireworks, including laser shows, which she ruled out because it lacks the needed backdrop for projection.
- She got quotes from three drone companies and chose the middle quote.
- She invested time in assisting the selected company on the 15 slide designs - most of which had local meaning, for example, Morris Island Lighthouse.
- They did a "beautiful" test run of the drone show on Dec. 30 with no concerns.
- The next day, however, high winds were forecasted. While the contractor was certified to do shows in winds up to 30mph and the CEO told Travers they should be safe, she expanded the area restricted from viewing out of an abundance of caution.
- While not the same company, the Folly event came on the heels of an Orlando, Florida incident earlier in the month in which a boy required heart surgery after a drone injured him during a holiday show.
- Early reports say the winds on the ground were 18mph, but Travers suspects the wind sheer at the top of the display was much stronger. She noticed that the top of the lighthouse display was missing and said a few of the drones did fall.
- The show stopped early on when one of the viewers reported being brushed by a drone and had scrapes on his cheek. The drones used by the company were a little larger than a hand.

- The FAA is still investigating. FAB has not received a refund for the show.
- As a result of Folly's experience, Travers would not currently advise paying for a drone show in a coastal environment that's susceptible to high winds. She also noted that it can be hard to get insurance for drone shows. FAB will likely discuss the issue at its March meeting.

Isle of Palms Cleanup Crew Annual Report



Looking back at 2024

IOP Cleanup Crew Snapshot

IOP Cleanup Crew uses volunteer power to keep the coast clean, protect natural ecosystems and public health, document litter data, and help solve the pollution crisis. Since 2018, thousands of volunteers have joined the crew to collect more than 225,000 litter items, while documenting the data in the [Litter Journal](#), established by South Carolina Aquarium, which also assists us at our events. **Note:** We plan to create an official board and become an 501c3 nonprofit by spring of 2025.

Our Welcome Committee

Cofounder/leader **Susan Hill Smith**, **Howard Hogue** (Beach Santa), **Rebecca Stephenson**, **Colleen Lehrke**, **Paula Richnafsky** (South Carolina Federal Credit Union community representative), **Linda Rowe** (conservation programs manager for South Carolina Aquarium), and **Beth Timon** (aquarium volunteer).

Event Schedule

We have established a year-long rhythm of regular litter sweeps. Frequency correlates to increased beach traffic and warmer weather, which influences the amount of litter.

- October through February – second Monday of the month, 4:30-5:30 pm
- March to end of May – spring litter sweep series every other Monday, with a 5:30 pm special welcome that's good for students and other new volunteers, with a litter sweep until 7 pm.
- Memorial Day week Wednesday to Labor Day – 2 litter sweeps a week: Mondays from 6-7 pm and our Wednesday Breakfast Club from 7-8 am
- In 2024, we partnered again with IOP Police on a July 5th morning litter sweep for three litter sweeps that holiday week.
- We occasionally support other groups, businesses and orgs with off-schedule litter sweeps.



Our Volunteers & Supporters

We involve volunteers from IOP & throughout the Lowcountry, as well as out-of-town visitors.

Our average attendance at our special spring series of sweeps was 90. That includes our April 22 Earth Day litter sweep, one of our highest ever attended events with 125+ volunteers, including City of IOP employees. In summer, our weekly Monday night litter sweeps have an average attendance of 37, and Wednesday morning Breakfast Club average was 12.

The City of Isle of Palms supports the “citizen scientists” of IOP Cleanup Crew by covering costs of T-shirts & magnets, which allow volunteers free City parking during events. Palmetto Pride and the aquarium have helped with supplies. IOP restaurants - Windjammer, Coconut Joe’s, Lawrence’s, Smugglers, The Boathouse, Acme, Sea Biscuit & Cafe Paname - offer discounts to volunteers after litter sweeps.

Special 2024 Litter Sweeps

- We held a “pop-up” Saturday litter sweep after mild impact from Hurricane Helene. With the OK of City staff, we intentionally targeted debris related to the severe erosion and destruction of docks, etc. at the southwest end of the island.
- In October 2024, we went on location for the first time to support Sullivan’s Island Elementary School’s PTA & Kaleidoscope with an after-school litter sweep with guests from North Charleston Elementary, which put together [this excellent video](#).



- We secured extra attention from local TV news outlets - [like this Channel 4 segment](#) - around the post-Fourth of July litter sweep that we typically do with Isle of Palms Police Department - helping to draw attention to the “dirtiest beach day of the year.”
- We are thankful to be featured on the City’s website and see our Facebook posts shared occasionally in the City’s social media.

Continuing efforts around cheap boogie boards



- In early 2024, Susan and IOP Environmental Advisory Board Chairwoman Sandy Brotherton successfully lobbied the IOP Harris Teeter to stop selling a common kind of cheap boogie boards that break apart easily with the potential to unleash hundreds to thousands of styrofoam beads into the environment.

- More recently, Susan has connected with the director of Isle of Palms County Park. She is talking to the all the county beach parks about eliminating this class of boards from the options they sell to park-goers.
- We are targeting a distinguishable kind of board - fabric cover on top, plastic mesh on bottom - crumbly old-school styrofoam inside. All boogie boards contain some kind of foam, but these low-quality boards appear to pose the most threat.
- Susan plans to reach out directly to wholesale distributors of beachgear, starting with one in Myrtle Beach that supplies stores throughout the Southeast, to see if they will eliminate the cheap boards from their offerings.
- We will also try to promote opportunities on IOP to rent boogie boards that are built to last.

Analysis of 2024 IOP Litter Data

Isle of Palms Cleanup Crew uses the South Carolina Aquarium's Litter Journal (an online platform available to the public) to itemize and document the litter we collect, as do other individuals and groups. A large percentage of our data – and the Litter Journal data for IOP – comes from the Front Beach area, which along with the adjacent area for Charleston County Park attracts the most IOP visitors.

Litter Journal Totals & Trends for IOP

Smoking litter continues to decrease on streetscape

- The percentage of recorded beach litter tied to smoking declined from 34% in IOP Cleanup Crew's first year (2018) to 21% in 2021 & 2022. This correlates with increased conversation/awareness around cigarette litter and IOP enacting a ban on smoking at the



beach at the start of 2020.

- From 2022 to 2023, the percentage of litter tied to smoking dropped again on the beach (21 to 16%) and on the streetscape, including parking lots (44 to 39%). This correlates

with the City installing more cigarette receptacles, including Surfrider's eye-catching "Save Your Butt" canisters, with Environmental Advisory Committee support.

- During 2024, the City made more concerted efforts to empty canisters, and the percentage of litter tied to smoking on the streetscape, where smoking is still legal, dropped 5 points to 34%.
- While the percentage of beach litter tied to smoking stayed constant YOY at 16%, we anticipate a further drop in 2025 if IOP Beach Services Officers continue to issue warnings and tickets for smoking on the beach, as they began to do mid-summer 2024.
- Working more with Front Beach businesses to increase available receptacles on their properties and encourage proper litter disposal could help continue the downward trend on the streetscape. Sandy Brotherton worked on this previously for the EAC.
- Cigarette litter is still the #1 litter item documented for the streetscape. It dropped to #2 on the beach in 2023 and remained there for 2024.

IOP's Litter Journal count dropped noticeably in 2024 with less "solo" sweeps by Beach Santa

For nearly a decade, Howard Hogue (Beach Santa) has devoted a significant amount of his time to independently collect litter on Isle of Palms for free, and in 2018, he began to document that with the Litter Journal. He continues this practice, but is steering more time to other parts of the Lowcountry, and early last year, he had a heart attack, which initially slowed him down.

While the total 2024 litter count for IOP in the Litter Journal showed a YOY drop of 7,826 items, an 11% dip, Howard's IOP totals dropped by 9,566 as he did less than half the number of "solo" litter sweeps on IOP as he did the year before. The City of Isle of Palms should factor this into their efforts to increase paid litter collection in the Front Beach area.

A look at the relative volunteer level of effort

This snapshot looks at counts from volunteers in similar group efforts for comparison purposes and can indicate changes in the amount of litter over time. The 2022 to 2023 drop was likely influenced by the notable drops in the % of our litter count tied to smoking on both the beach and

the streetscape - declining smoking litter may mean declining litter overall, though there is little



change from 2023 to 2024.

- 2022: 60,487 debris items were removed by 1,382 group volunteers (43.7 debris/volunteer LOE)
- 2023: 48,786 debris items were removed by 1,339 group volunteers (36.4 debris/volunteer LOE)
- 2024: 51,786 debris items were removed by 1,409 group volunteers (36.7 debris/volunteer LOE)

We can't track this but know many groups and individuals collect litter on their own without recording in the Litter Journal. With growing awareness and initiatives that include the Fill A Bag bucket tree at Front Beach, untracked efforts have likely increased and influence the litter amounts our volunteers encounter.

IOP Litter Data Totals

61,933 litter items documented for Isle of Palms (IOP), according to total Litter Journal data for 2024. That's down 7,826 from 69,759 litter items in 2023, likely due to the dip in litter sweeps by Beach Santa.

6,900 litter items (11% of total) removed by Howard Hogue (aka Beach Santa) in 23 "solo" sweeps (2 Beach sweeps, 21 Roadside sweeps). That's less than half his litter sweeps (52) and his litter count (16,446) in 2023.

51,786 litter items (84%) removed by IOP Cleanup Crew & friends, including 4 SC Aquarium-led sweeps. In total: 41 group sweeps (9 private groups, 4 off-season monthly sweeps, 6 Spring sweeps, 11 Monday Night Summer sweeps, and 11 Summer Breakfast Club sweeps). That reflects 1,409 recorded instances of volunteering, most for 30-60 minutes.

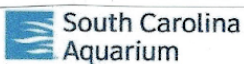
46,497 items (75%) involve some type of plastic. That includes cigarette butts, which have plastic threads. All other material types were found in much lower quantities (Paper - 12%, 7,202; Metals - 4%, 2,452; Glass - 1%, 655; Other items [clothes, wood & construction debris, fireworks, etc.] at 8%, 4,927).

41,512 litter items removed from beach habitat. Of these items, **16% (6,467)** were some form of smoking debris (cigarette filters, cigar tips, eCig parts).

20,421 litter items removed from roadside, parking lots, and developed areas of the island. Of these items, **34% (6,902)** were smoking debris.

Beach Top 15 Littered Items (87% of all beach litter)	
Plastic Food Wrappers + Film	7009
Cigarettes + Filters	6070
Paper + Cardboard	4535
Plastic Caps + Lids	3345
Other Plastic	2359
Plastic Fragments (rigid)	2218
Clothing, Shoes + Fabric	1805
Styrofoam (other)	1706
Plastic Straws	1526
Plastic Straw Wrappers	1381
Other Items (please list)	1056
Plastic Toys	955
Fireworks	839
Plastic Cups, Plates, etc.	718
Plastic Bottles	670

Streetscape Top 15 Littered Items (93% of streetscape litter)	
Cigarettes + Filters	6642
Paper + Cardboard	2639
Plastic Food Wrappers + Film	2173
Plastic Straws	1702
Plastic Caps + Lids	1031
Other Plastic	752
Other Metals	669
Plastic Cups, Plates, etc.	565
Plastic Fragments (rigid)	528
Clothing, Shoes + Fabric	388
Plastic Straw Wrappers	362
Glass Bottles + Fragments	356
Beverage Cans (aluminum)	349
Plastic Bottles	299
Other Medical Supplies	211



Litter Journal Report

Input data and photos: <https://www.anecdota.org/projects/view/122>

Name(s): _____ Number of Participants: _____
Location: _____ Habitat: _____ Date: _____ Duration: _____

When possible, include descriptions/brands!

Plastics

Bags – Non-Retail: _____

Bags – Retail: _____

Bottles: _____

Caps/Lids: _____

Food Wrappers/Film: _____

Fragments (rigid): _____

Straws/Stirrers: _____

Straw Wrappers: _____

Styrofoam (food/drink): _____

Styrofoam (other): _____

Toys: _____

Cups/Plates (etc): _____

Utensils: _____

Other Plastics (list): _____

Dumping of Large Items

Appliances (list): _____

Full Trash Bags: _____ Car Parts: _____

Tires/Tire Pcs: _____

Building Materials: _____

Fishing Gear

Fishing Line/Nets: _____ Rope: _____

Other (hooks, lures, etc.): _____

Glass

Bottles/Fragments: _____

Other (list): _____

Smoking-related Items

Cigarettes/Filters: _____

Cigars/Tips: _____

Electronic Cigarette Parts: _____

Lighters: _____

Tobacco Packaging: _____

Balloons: _____

Medical Supplies/Personal Hygiene

Band-Aids/Gauze: _____ Condoms: _____

Diapers: _____ Masks: _____

Other (list): _____

Metals

Beverage Cans (aluminum): _____

Food Cans (tin/steel): _____

Other Metals (list): _____

Miscellaneous Items

Batteries: _____

Clothing/Shoes/Fabric: _____

Fireworks: _____

Paper/Cardboard: _____

Rubber (hard/foam): _____

Other Items (list): _____

Special IOP Tally

Sandbags: _____ Plastic sandbag threads: _____

Boogie boards (note if broken): _____