



TOWN OF HIGHLAND BEACH

AGENDA MEMORANDUM

MEETING TYPE: Town Commission Meeting

MEETING DATE October 18, 2022

SUBMITTED BY: Ingrid Allen, Town Planner, Building Department

SUBJECT: Introduction of proposed amendment to the Town Code of Ordinances to incorporate sea turtle protection lighting standards.

SUMMARY:

Section 30-85 of the Town Code of Ordinances ("Town Code") requires that "[a]ll lighting of all structures east of SR A1A shall comply with the "sea turtle protection" lighting standards as adopted by the town." Such lighting standards are currently found in Section 4-8, and are limited to the following provision:

(c) *Lighting restrictions along beach.* No artificial light shall illuminate any area of the beach which may be used for turtle nesting and hatching during the period from March 1 to October 31 of each year, from dusk to dawn.

Section 4-8 does not address the different types of artificial lighting sources (e.g. residential dwellings, parking areas, walking paths, fountains, pool areas, etc.) that may be visible from the beach including from structures west of State Road A1A nor does it provide specific types of lighting fixtures and sources that protect sea turtle populations.

The Coastal Management/Conservation Element of the Town's Comprehensive Plan provides the following policies specific to the protection of sea turtles:

Objective 1.4 The Town will actively support protection and conservation of coastal natural resources including manatees, sea turtles, seagrass beds, and mangrove stands. The Town will have met this objective through the provision of education materials regarding the protection of the coastal natural resources within the community.

Policy 1.4.1 The Town will coordinate with the appropriate agencies in order to ensure the protection of its coastal natural resources, including manatees, sea turtles, seagrass beds, and mangrove stands.

Policy 1.4.2 The Town shall maintain and enforce provisions to protect its coastal natural resources, including manatees, sea turtles, seagrass beds, and mangrove stands, in its Code of Ordinances.

Policy 3.3.3 The Town will include within its land development regulations provisions to require limitations on outside lighting so as to not attract sea turtle hatchlings away from the water during hatching season.

In addition, the Town’s 2022 Strategic Priorities Plan includes a Sea Turtle Lighting Standards initiative as part of the “Ranked Projects & Initiatives List.” Therefore, in compliance with the Town Code, the Town Comprehensive Plan, and the Town’s 2022 Strategic Priorities Plan, staff is proposing an amendment to the Town Code to incorporate more comprehensive sea turtle protection lighting standards. The proposed Ordinance is based on the State of Florida Model Lighting Ordinance for Sea Turtle Protection (dated December 17, 2020) and includes the following provisions:

- Purpose and intent
- Definitions
- Applicability
- Lighting restrictions along beach
- Standards for exterior and interior lighting affixed to new structures, new construction and improvements to existing structures.
- Outdoor areas
- Parking areas and roadways
- Pool areas
- Beach access points and dune walkovers
- Existing exterior and interior lighting
- Special events, motor vehicles and temporary lighting
- Enforcement, penalty

According to the Florida Fish and Wildlife Conservation Commission (FWC), within the last five (5) years, the Town has had more documented sea turtle nests than the Cities of Boca Raton and Delray Beach (see Attached Table 1). The following table provides the annual sea turtle nests totals for the Town from 2017-2022:

Year	County	Beach	Loggerhead Nest	Green Turtle Nest	Leatherback Nest	% of County nests (all species combined)
2017	Palm Beach	Highland Beach	1,182	644	3	4.61
2018	Palm Beach	Highland Beach	902	46	7	3.61
2019	Palm Beach	Highland Beach	904	447	6	3.25
2020	Palm Beach	Highland Beach	1,002	281	11	3.58
2021	Palm Beach	Highland Beach	814	284	6	3.33
Survey Boundary Description 649m South of Del Harbor Drive (26.43212, -80.06168) to 8 km North of Palm Beach/Broward County Line (26.39106, -80.06613)					Length (km) 4.8	

Data Source: FWC/FWRI Statewide Nesting Beach Survey Program Database as of March 22, 2022

According to the FWC, both the Leatherback and Green sea turtles are endangered while the Loggerhead is threatened. Threats to each of these three (3) sea turtle species includes coastal development which "...increases artificial lighting which can be detrimental to hatchlings causing them to migrate towards the light instead of the ocean."¹

As part of the Commission's introductory review of this item, it is worthwhile to note that pursuant to Section 2-140(c) of the Town Code, the Natural Resources Preservation Advisory Board ("Board") has the power and duty to "[r]eview existing and proposed town ordinances which affect the environment, and advise the town commission regarding the need for modifications or changes to such ordinances." Therefore, staff recommends that if the Commission should desire to move forward with the proposed Ordinance, that it be reviewed by the Board.

FISCAL IMPACT:

N/A

ATTACHMENTS:

Proposed Ordinance

Table 1 – Sea Turtle Data provided by FWC

Ordinance Process Flowchart

RECOMMENDATION:

At the discretion of the Town Commission.

¹ <https://myfwc.com/wildlifehabitats/profiles/>

TABLE 1

Data Source: FWC/FWRI Statewide Nesting Beach Survey Program Database as of 22 March 2022

Year	County	Beach	Survey Length (km)	Loggerhead Nest	Loggerhead False Crawl	Green Turtle Nest	Green Turtle False Crawl	Leatherback Nest	Leatherback False Crawl	Annual Number of Nests (all species combined)	% of County Nests (all species combined)	Nest Density (#Nests/Km) all species combined
2017	Palm Beach	Highland Beach	4.8	1,182	1,470	644	422	3	0	1,829	4.61	381
2018	Palm Beach	Highland Beach	4.8	902	840	46	26	7	0	955	3.61	199
2019	Palm Beach	Highland Beach	4.8	904	797	447	202	6	0	1,357	3.25	283
2020	Palm Beach	Highland Beach	4.8	1,002	844	281	115	11	0	1,294	3.58	270
2021	Palm Beach	Highland Beach	4.8	814	844	284	193	6	2	1,104	3.33	230
2017	Palm Beach	Boca Raton	8.0	767	1,513	299	458	5	1	1,071	2.70	134
2018	Palm Beach	Boca Raton	8.0	686	1,158	19	23	18	0	723	2.73	90
2019	Palm Beach	Boca Raton	8.0	913	1,181	393	535	18	2	1,324	3.17	166
2020	Palm Beach	Boca Raton	8.0	756	1,217	132	193	13	3	901	2.49	113
2021	Palm Beach	Boca Raton	8.0	660	991	192	317	21	0	873	2.63	109
2017	Palm Beach	Delray Beach	4.5	252	900	46	120	6	2	304	0.77	68
2018	Palm Beach	Delray Beach	4.5	271	677	2	11	5	1	278	1.05	62
2019	Palm Beach	Delray Beach	4.5	290	655	58	85	15	1	363	0.87	81
2020	Palm Beach	Delray Beach	4.5	285	536	42	78	21	1	348	0.96	77
2021	Palm Beach	Delray Beach	4.5	356	589	28	43	15	3	399	1.20	89
2017	Palm Beach	Juno Beach	9.7	5,149	8,896	4,343	7,282	64	8	9,556	24.06	985
2018	Palm Beach	Juno Beach	9.7	5,552	7,512	353	404	111	24	6,016	22.74	620
2019	Palm Beach	Juno Beach	9.7	6,452	10,738	4,258	6,541	123	12	10,833	25.92	1117
2020	Palm Beach	Juno Beach	9.7	7,129	10,892	2,249	2,500	216	32	9,594	26.54	989
2021	Palm Beach	Juno Beach	9.7	5,458	9,343	2,373	3,531	157	45	7,988	24.10	824

Cc = Loggerhead; Cm = Green Turtle; Dc = Leatherback

Year	County	County Totals (Cc)	County Totals (Cm)	County Totals (Dc)	Annual Number of Nests in Palm Beach County (all species combined)
2017	Palm Beach	26,245	13,263	207	39,715
2018	Palm Beach	24,876	1,277	305	26,458
2019	Palm Beach	28,790	12,612	397	41,799
2020	Palm Beach	29,465	6,125	565	36,155
2021	Palm Beach	25,880	6,788	484	33,152

ORDINANCE INITIATION

The initiation of a new ordinance may originate from several different sources:

- Commissioner/Staff initiative
- Citizen concerns expressed through public comments
- Response to state and federal actions
- Advisory Board Initiative

INTRODUCTION TOWN COMMISSION

A proposal for a new ordinance is presented to the commission for consideration. If approved in concept, the commission directs Town Manager and Town Attorney to research the subject matter and create a draft ordinance. Draft ordinance forwarded to the appropriate Advisory Board for recommendation.

Staff/Legal Team
Research & Draft
Ordinance

ADVISORY BOARD(S)

The appropriate advisory board review and proposes any edits draft ordinance. This process may involve multiple meetings for review and to solicit public comments. Once a draft is settled upon, the advisory board provides a recommendation with the final draft to the commission for consideration for a First reading.

TOWN COMMISSION -- 1st READING

Commission discusses the public merits of the ordinance along with the recommendations of the assigned advisory board(s). Public input provided. Commission may move forward to 2nd Reading/Public Hearing or may send back to advisory board and/or staff for modifications or additional research.

TOWN COMMISSION -- 2nd READING/PUBLIC HEARING

After public hearing and final discussion, the commission votes to approve and enact ordinance. The Commission may request additional modifications.

TOWN STAFF -- ADOPTION & IMPLEMENTATION