



**BEACH STEWARDSHIP COMMITTEE SPECIAL MEETING
CITY OF ST. PETE BEACH
COMMISSION CHAMBERS**

155 Corey Avenue
St. Pete Beach, FL 33706

Tuesday, June 18, 2024
9:00 AM – 10:30 AM

Call to Order
Pledge of Allegiance
Roll Call

SPECIAL MEETING

1. Presentations -
 - a. **Florida Model Sea Turtle Lighting Ordinance - Stacey Gallagher, Sea Turtle Conservancy (Zoom)**
2. Approval of the Agenda -

Action Request: Motion to approve the June 18th Special Beach Stewardship meeting agenda.
3. Audience Comments -

Comments shall be limited to 3 minutes for general and agenda items. Agenda item comments will be called when that item is heard. Please complete and submit a comment card to the Clerk.
4. Action Items -
 - a. **Florida Model Sea Turtle Lighting Ordinance**
 - b. **Shark Fishing**
 - c. **Dune preservation**
5. Adjournment

APPEAL: In accordance with 286.0105, Florida Statute (Notices of meetings and hearings must advise that a record is required to appeal), if a person decides to appeal any decision made by this committee, board, agency, or commission with respect to any matter considered at this meeting or hearing, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

AMERICANS WITH DISABILITIES ACT (ADA): In accordance with the Americans with Disabilities Act and Florida Statutes, if any person with a disability defined by the ADA needs special accommodation to participate in this proceeding, then not later than two business days prior to the proceeding, he or she should contact City Hall at (727) 367-2735.

**The public is cordially invited to attend this meeting.
All agenda material is available for review at City Hall or www.stpetebeach.org.**

City/County of _____, Florida

Chapter ____.

MODEL LIGHTING ORDINANCE FOR SEA TURTLE PROTECTION

Table of Contents

SECTION ____-1. - BASIS OF ORDINANCE

- Sec. ____-1.1. - Findings of Fact
- Sec. ____-1.2. - Title of Ordinance
- Sec. ____-1.3. - Ordinance Purpose and Objectives
- Sec. ____-1.4. - Definitions

SECTION ____-2. - SEA TURTLE LIGHTING DISTRICT

- Sec. ____-2.1. - Applicability
- Sec. ____-2.2. - Annual Public Notice

SECTION ____-3. - LIGHTING PROVISIONS

- Sec. ____-3.1. - General
- Sec. ____-3.2. - Exterior and Interior Lighting Affixed to New Structures, New Construction and Improvements to Existing Structures
- Sec. ____-3.3. - Outdoor Areas
- Sec. ____-3.4. - Parking Areas and Roadways
- Sec. ____-3.5. - Pool Areas
- Sec. ____-3.6. - Beach Access Points and Dune Walkovers
- Sec. ____-3.7. - Existing Exterior and Interior Lighting
- Sec. ____-3.8. - Pier Structures
- Sec. ____-3.9. - Special Events, Motor Vehicles, and Temporary Lighting

SECTION ____-4. - COMPLIANCE AND ENFORCEMENT PROCEDURES

- Sec. ____-4.1. - Beach Lighting Inspector
- Sec. ____-4.2. - Notice of Violation
- Sec. ____-4.3. - Penalties
- Sec. ____-4.4. - Sea Turtle Fund

SECTION ____-5. - OTHER CLAUSES

- Sec. ____-5.1. - Conflict with Other Ordinances
- Sec. ____-5.2. - Severability
- Sec. ____-5.3. - Effective Date

ORDINANCE NUMBER 20__-__

LAND DEVELOPMENT CODE

AN ORDINANCE OF THE CITY/COUNTY OF _____ AMENDING CITY/COUNTY CODE CHAPTER _____ PROVIDING FOR AMENDMENTS TO ADOPT MODEL LIGHTING REQUIREMENTS; PROVIDING FOR REPEAL OF ORDINANCES; PROVIDING FOR TERRITORY EMBRACED; PROVIDING FOR SEVERABILITY; PROVIDING FOR INCLUSION INTO THE CODE OF ORDINANCES; PROVIDING FOR EFFECTIVE DATE.

SECTION ____-1. – BASIS OF ORDINANCE

Sec. ____-1.1. - Findings of Fact

***Whereas, the City/County of _____** recognizes that light pollution of beaches is a serious threat to sea turtles and other species inhabiting its beaches; and

***Whereas, the City/County of _____** recognizes that nesting adult and hatchling sea turtles are negatively affected by light pollution created by artificial light visible from any portion of the beach; and

***Whereas, the City/County of _____** recognizes that sea turtles are protected by federal and state law; and

***Whereas, the City/County of _____** recognizes that both its economy and the quality of life of its residents are enriched by a healthy sea turtle population; and

***Whereas, the City/County of _____** desires to minimize the detrimental effect on nesting sea turtle populations, and other listed sensitive wildlife by implementing a system of rules and regulations that reduces the amount of artificial light intentionally or unintentionally visible from beaches;

**Guidance: These generic Findings of Fact are illustrative only. Findings of Fact should relate to the specific context of the County or City adopting a sea turtle lighting ordinance and may include data on sea turtle nesting, and disorientation/misorientation if available. It may also include information on the qualitative and quantitative value of sea turtles to the specific beachfront economies.*

NOW, THEREFORE, BE IT ORDAINED, BY THE CITY COUNCIL/BOARD OF COUNTY COMMISSIONERS OF THE CITY/COUNTY OF _____ ON THIS ____ DAY OF _____, 20__.

Sec. ____-1.2. - Title of Ordinance

This ordinance shall be referred to as the **City/County of _____** Lighting Ordinance for Sea Turtle Protection.

Sec. ____-1.3. - Ordinance Purpose and Objectives

The purpose of this Ordinance is to protect nesting and hatchling sea turtles on the beaches in the **City/County of _____** by ensuring that their nesting habitat is not degraded by artificial light. The objective of the ordinance is for the appropriate design and implementation of coastal lighting systems to

ensure that light pollution does not interfere with sea turtle nesting and hatching events while at the same time protecting public safety. In order to further the objective of full implementation, this Ordinance also includes provisions designed to educate residents and beach users in the **City/County of _____** on the benefits of appropriate coastal lighting and provides for regular inspections to ensure compliance with the acceptable lighting standards.

Sec. ___-1.4. - Definitions

1. **Artificial Light**: the light emanating from any human-made device.
2. **Beach**: the zone of unconsolidated material that extends landward from the mean low water line to the place where there is marked change in material or physiographic form, or to the line of permanent vegetation.
3. **Certified Wildlife Lighting**: lighting fixtures and bulbs reviewed and approved with conditions of use through the Florida Fish and Wildlife Conservation Commission's Wildlife Lighting Certification Process and published at <https://myfwc.com/conservation/you- conserve/lighting/criteria/certified/>.
4. **Cumulatively Visible**: light from numerous artificial light sources that as a group can be seen by an observer standing anywhere on the beach.
5. **Directly Visible**: occurs when glowing elements, lamps, globes, or reflectors of an artificial light source can be seen by an observer standing anywhere on the beach.
6. **Foot-Candle**: the English unit for measuring illuminance; the uniform illumination of a surface one foot away from a point source of one candela; one lumen per square foot; equal to 10.76 lux.
7. **Frontal Dune**: the first natural or man-made mound or bluff of sand which is located landward of the beach and which has sufficient vegetation, height, continuity, and configuration to offer protective value.
8. **Full Cutoff**: 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.
9. **Fully Shielded**: 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.
10. **Indirectly Visible**: light reflected from glowing elements, lamps, globes, or reflectors of an artificial light source that can be seen by an observer standing anywhere on the beach without the light source being directly visible.
11. **Long Wavelength**: a lamp or light source emitting light wavelengths of 560 nanometers or greater and absent wavelengths below 560 nanometers.

12. **Nesting Season:** For the **City/County of _____**, the sea turtle nesting period is from _____ of each year.

Guidance: For Brevard, Indian River, St. Lucie, Martin, Palm Beach, and Broward Counties, the sea turtle nesting period is from March 1 through October 31 of each year. For Bay, Charlotte, Collier, Dade, Duval, Escambia, Flagler, Franklin, Gulf, Lee, Manatee, Monroe, Nassau, Okaloosa, Pinellas, St. Johns, St. Lucie, Santa Rosa, Sarasota, Volusia, and Walton Counties, the sea turtle nesting period is from May 1 through October 31.

13. **Nighttime:** the locally effective time period between sunset and sunrise.
14. **Non-egress Lighting:** exterior lighting that is not being used to light a distinct route or meet minimum requirements for emergency access to or from a building, including but not limited to decorative lights (e.g. strobe lights, string lights, etc.), balcony lights, landscape lights, and uplights.
15. **Outdoor Area:** any portion of a property that could have an artificial light source not attached to a permanent structure, including but not limited to pathway lighting, landscape lighting, pool lighting, etc.
16. **Sea Turtle:** any turtle, including all life stages from egg to adult, of these species: Green (*Chelonia mydas*), Leatherback (*Dermochelys coriacea*), Loggerhead (*Caretta caretta*), Hawksbill (*Eretmochelys imbricata*), and Kemp's ridley (*Lepidochelys kempii*). For the purposes of this ordinance, the term sea turtle is synonymous with marine turtle.
17. **Sea Turtle Nesting Habitat:** all sandy beaches adjoining the waters of the Atlantic Ocean, the Gulf of Mexico, and the Straits of Florida in all coastal counties and all inlet shorelines of those beaches. Nesting habitat includes all sandy beach and unvegetated or sparsely vegetated dunes immediately adjacent to the sandy beach and accessible to nesting female turtles.
18. **Temporary Lighting:** any non-permanent light source that may be hand-held or portable including but not limited to tiki torches, lanterns, flashlights (including cell phone flashlights), candles, flash photography, etc.
19. **Tinted glass:** glass modified via tinting, film or other material to reduce the inside to outside light transmittance value.

SECTION ____-2. - SEA TURTLE LIGHTING DISTRICT

Sec. ____-2.1. - Applicability

1. An overlay district, known as the *Sea Turtle Lighting District*, is hereby established within the **City/County of _____**.
2. The *Sea Turtle Lighting District* shall include all properties within the **City/County of _____**, that may produce artificial light directly, indirectly, or cumulatively visible from any portion of the beach, regardless of whether those properties are beachfront properties.

3. 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*.
4. The provisions of this Ordinance are not intended to prevent the use of any design, materials or method of installation or operation not specifically prescribed herein, provided any such alternate has been approved. The **City/County of _____** may approve any such proposed alternate provided it:
 - a. Provides at least approximate equivalence to the applicable specific requirements of this Ordinance, and;
 - b. Is otherwise satisfactory or complies with the intent of this Ordinance, and;
 - c. Has been designed or approved by a registered lighting or electrical engineer and is supported by calculations showing that the design submitted meets that intent of the Ordinance. This sub-section shall not have the effect of waiving the lumen caps specified in this Ordinance.
 - d. Has been determined to meet requirements for Certified Wildlife Lighting and/or lights that meet FWC’s Wildlife Lighting Guidelines, including long wavelength light sources (without the use of filters), full cut-off, and fully shielded fixtures.
5. Any person substantially aggrieved by any decision of the *Beach Lighting Inspector* or the *Building Official* made in administration of this Ordinance has the right and responsibilities of appeal to the *Advisory/Appeals Board* of this jurisdiction.

*Guidance: This Model establishes an Overlay District for the purpose of implementing the ordinance. This ordinance could be applied by simply consolidating (2) and (3) above and making it applicable to “all properties within the **City/County of _____** that may produce artificial light directly, indirectly, or cumulatively visible from any portion of the beach, regardless of whether those properties are beachfront properties.” However, creating a District may have other benefits which include incorporating other Sea Turtle best management practices not related to lighting, as well as raising awareness through signage, etc.*

Sec. ___-2.2. - Annual Public Notice

At least thirty days prior to the commencement of every sea turtle nesting season, the **City/County of _____** shall provide notice to affected persons within the *Sea Turtle Lighting District* of the provisions contained in this Ordinance.

Declaring an official annual “lights out for sea turtles” day either the first Monday in February or April depending on the county, could also be useful. Another alternative would be designating the responsible department or official for implementing the ordinance and noticing the public.

SECTION ___-3. - LIGHTING PROVISIONS

Sec. ___-3.1. – General

Guidance: In order to provide the highest level of protection for nesting marine turtles and their hatchlings, local governments are encouraged to adopt all of the following standards for artificial beachfront lighting sources.

1. The following standards for artificial light sources are intended to help minimize harmful effects of light pollution in sea turtle nesting areas. The use of Certified Wildlife Lighting will provide the highest level of protection for nesting sea turtles and their hatchlings. Certified Wildlife Lighting refers to lighting fixtures and bulbs reviewed and approved through the Florida Fish and Wildlife Conservation Commission's Wildlife Lighting Certification Process and published at <https://myfwc.com/conservation/you-serve/lighting/criteria/certified/>. Certified Wildlife Lighting and/or lights that meet FWC's Wildlife Lighting Guidelines, must be installed and maintained according to the approved conditions of use to achieve the light pollution reduction objectives of this Ordinance.

Guidance: The FWC Certified Wildlife Lighting website references the required options and bulleted caveats for each certified fixture. These conditions of approved use are also included in the certification letter issued to the manufacturer for the fixture. FWC Sea Turtle Lighting Guidelines can be accessed at the Sea Turtles and Lights webpage at <https://myfwc.com/wildlifehabitats/wildlife/sea-turtle/lighting/>.

2. New construction refers to all new construction of or additions and alterations to buildings, pools, pavement, other structures, landscape areas or lighting systems, including the change or resumption of land use. The most protective lighting standards apply to new construction visible from the beach.
3. Existing artificial lighting refers to lighting fixtures, sources and systems operating prior to the effective date of this ordinance. Existing lights and light sources that are visible from the beach shall be replaced or modified to conform to standards given in Section -3.7. In order to bring existing lighting systems into future compliance with this Ordinance, standards for new coastal construction shall be applied when permits are sought for new structures or the alteration, movement, enlargement, replacement or installation of new lighting systems.

Sec. ___-3.2. Exterior and Interior Lighting Affixed to New Structures, New Construction and Improvements to Existing Structures

1. All lighting affixed to the exterior of new permanent structures, construction or additions shall be long wavelength, 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.
2. As an exception to -3.2.1. above, non-egress lighting may be affixed to the landward exterior of permanent structures provided that the fixtures are fitted with a long wavelength source and are not directly, indirectly, or cumulatively visible from any portion of the beach.

3. Lighting at egress points shall be limited to the minimum number of fixtures and foot-candles necessary to meet federal, state, and local safety requirements.
4. Locations including but not limited to stairwells, elevators, parking garages, or courtyards shall not produce light that is directly, indirectly, or cumulatively visible from any portion of the beach. Light screens, shades or curtains shall be used to block visibility of interior lights from the beach. Light screens shall be used on open or enclosed staircases on the seaward or shore-perpendicular side of a building or for parking garages to limit visibility of lights from the nesting beach.
5. All glass windows, walls, railings and doors on the seaward and shore-perpendicular sides of any new construction shall use tinted glass with an inside to outside light transmittance value of 45 percent or less.

Guidance: Local governments may apply special considerations to control interior lighting from being directly visible from the beach.

6. Emergency lights are not subject to the above standards if on a separate circuit and activated only during power outtages or other situations in which emergency lighting is necessary for public safety.

Sec. ___-3.3. - Outdoor Areas

1. All lighting of outdoor areas shall be long wavelength, 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.
2. Lighting of paths, walks and routes of building access shall use low level fixtures such as step, paver, path, recessed wall or bollard lights. Bollard lights are not to exceed 42 inches in height and other low level fixtures are to meet the height requirements of FWC's Wildlife Lighting Guidelines. Fixtures shall be downward directed and utilize long wavelength lamps and beachside shields.
3. As an exception to -3.3.1. above, non-egress outdoor lighting may be installed landward of buildings or other opaque structures provided that they are fitted with long wavelength light sources and are not directly, indirectly, or cumulatively visible from any portion of the beach.
4. Internally or externally lighted signs shall not be located on the seaward and shore-perpendicular sides of any structures, and shall not produce light that is directly, indirectly, or cumulatively visible from any portion of the beach.
5. Ponds and fountains on the seaward and shore-perpendicular sides of any structures shall not produce light that is directly, indirectly, or cumulatively visible from any portion of the beach.
6. Fire pits located on the seaward and shore-perpendicular sides of any structure shall be shielded with an opaque structure or partition, and positioned such that the flame is not directly, indirectly, or cumulatively visible from any portion of the beach. Bonfires and bonfire pits are prohibited within sea turtle nesting habitat during sea turtle nesting season.
7. Televisions or other illuminated screens shall be located landward of the dune and shall be shielded or positioned such that they are not directly, indirectly, or cumulatively visible from the beach.

Sec. ___-3.4. - Parking Areas and Roadways

1. All lighting of parking areas and roadways shall be long wavelength, downward directed, full cutoff, fully shielded, and mounted to the minimum level required to maintain compliance with federal, state and local law.
2. Parking area and roadway lighting shall be shielded from the beach via vegetation, natural features, or artificial structures rising from the ground. These shall prevent artificial light sources, including but not limited to vehicular headlights, from producing light that is directly, indirectly, or cumulatively visible from any portion of the beach.
3. Lighting of roadways and parking areas shall produce no more lighting than the minimum requirement as outlined by federal, state and local law.
4. Lighting of parking areas and roadways shall consist of either:
 - a. Ground-level downward-directed fixtures, equipped with interior dark-colored, non-reflective baffles or louvers, mounted either with a wall mount, on walls or piles, facing away from the beach, or
 - b. Bollard-type fixtures, which do not extend more than 42 inches above the adjacent floor or deck, measured from the bottom of fixture, equipped with downward-directed louvers that completely hide the light source, and externally shielded on the side facing the beach, or
 - c. Pole-Mounted Lights, if required, shall adhere to the restrictions located in subsection -3.4.5.
5. Pole-mounted lights shall only be used in parking areas and roadways when mounting the lights at lower elevations cannot practicably comply with minimum light levels set forth in applicable federal and state laws designed to protect public safety. If required, pole-mounted lights shall be:
 - a. Located on the landward sides of buildings and shall not produce light that is directly, indirectly, or cumulatively visible from any portion of the beach,
 - b. Mounted at the minimum height required to meet the minimum light level requirement-, and
 - c. Downward-directed onto non-reflective surfaces.

Guidance: Roadway and parking area lighting designed pursuant to Section 231.2.1 Wildlife-Sensitive Conventional Lighting of the Florida Department of Transportation (FDOT) Design Manual (January 1, 2020) available at <https://www.fdot.gov/roadway/fdm/default.shtm>, and meeting the requirements of Section 992-2.4.2, Luminaires for Wildlife-Sensitive Conventional Lighting, of the FDOT "Standard Specifications for Road and Bridge Construction (January 2020)," and available at <https://www.fdot.gov/programmanagement/implemented/specbooks/default.shtm>, are expected to meet the minimum standards of this section.

6. Equipment yards, storage yards, and temporary security lights shall also adhere to the lighting restrictions contained in this Section.

Sec. ___-3.5. - Pool Areas

1. Lighting of pool decks, pool facilities, swimming pools, and spas shall be long wavelength and fully shielded.
2. Lighting of the pool water surfaces and the pool wet deck surfaces shall comply with the minimum light levels set forth in applicable federal and state laws designed to protect public safety.
3. Above-water lighting of pool decks, pool facilities, swimming pools, and spas shall otherwise adhere to the applicable requirements for acceptable light fixtures contained in Section 1 and Section 2 of this Section.
4. Underwater lighting of pools or spa light shall:
 - a. Be mounted horizontally in the wall,
 - b. Not produce light that is directly, indirectly, or cumulatively visible from any portion of the beach, and
 - c. Shall comply with minimum light levels set forth in applicable federal and state laws designed to protect public safety.

Sec. ___-3.6. - Beach Access Points and Dune Walkovers

1. Lighting of beach access points shall be located and configured to only illuminate areas landward of the beach and frontal dune. All lighting of beach access points shall be long wavelength, downward directed, full cutoff and fully shielded and shall not be directly, indirectly, or cumulatively visible from the beach.
2. Lights are allowable on dune walkovers or elevated boardwalks only as required for building code purposes and may only be installed landward of the frontal dune. Walkover lighting shall not be directly, indirectly or cumulatively visible from the beach.

Sec. ___-3.7. – Existing Exterior and Interior Lighting

1. Reduce or eliminate the negative effects of existing exterior artificial lighting through the following measures:
 - a. Reposition, modify or remove existing lighting fixtures so that the point source of light or any reflective surface of the light fixture is no longer directly, indirectly or cumulatively visible from the beach;
 - b. Replace fixtures having an exposed light source with fully shielded fixtures;
 - c. 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;

- d. Replace non-directional fixtures with directional fixtures that point down and away from the beach;
 - e. Provide shields for fixtures visible from the beach and not practical to immediately 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;
 - f. Replace pole lamps with low-profile, low-level luminaries so that the light source or any reflective surface of the light fixture is not visible from the beach;
 - g. Plant or improve vegetation buffers between the light source and the beach to screen light from the beach;
 - h. Construct a ground level barrier landward of the beach and frontal dune to shield light sources from the beach. Ground-level barriers are to be considered a last resort when no other remediation of the light source is feasible. Ground level barriers may be subject to state coastal construction control line regulations under section 161.053, Florida Statutes, and must not interfere with sea turtle nesting or hatchling emergence, or cause short- or long- term damage to the beach and dune system;
 - i. Permanently remove or permanently disable any fixture which cannot be brought into compliance with the provisions of these standards.
2. Take one or more of the following measures to minimize interior light emanating from doors and windows within line-of-sight of the beach:
- a. Apply window tint or film that meets the light transmittance standards for tinted glass;
 - b. Rearrange lamps and other moveable fixtures away from windows;
 - c. Use opaque shades or room darkening window treatments (e.g., blinds, curtains, screens) to shield interior lights from the beach.

Guidance: In order to provide the highest level of protection for nesting marine turtles and their hatchlings, local governments are directed to adopt all of the above standards for existing artificial beachfront lighting sources.

Sec. ___-3.8. – Pier Structures

1. Lighting of pier structures projecting over the beach or over water shall be long wavelength, downward-directed, and fully shielded.
2. Lighting of pier structures projecting over the beach, or over water, shall be mounted no higher than 42 inches above the deck surface. These shall be directed onto the deck surface only, preventing light pollution or light spillage beyond the walking surface.
3. Lighting of pier structures projecting over the beach or over water shall comply with minimum light levels set forth in applicable federal and state laws designed to protect public safety.

Guidance: Note that the pier light standards do not address light sources from illuminated screens or signage associated with restrooms or bait shops on piers.

Sec. ___-3.9. - Special Events, Motor Vehicles, and Temporary Lighting

1. Lighting associated with a special event that may directly, indirectly, or cumulatively be visible from any portion of the beach shall not be authorized at nighttime during sea turtle nesting season.
2. The operation of all motorized vehicles, except emergency and law enforcement vehicles or those permitted on the beach for sea turtle conservation in accordance with Florida Statute 379.2431 (1), or other research and conservation, shall be prohibited on the beach at nighttime during sea turtle nesting season.
3. Within sea turtle nesting season, temporary work zone lighting for roadway construction and during declared emergencies shall be directed away from the beach to avoid illumination of or direct visibility from the beach. Work zone luminaires shall be shielded to avoid lighting areas outside of the immediate construction area.
4. All other temporary construction lighting shall be:
 - a. Inclusive of all the standards of this Section, including using fixtures that are long wavelength, downward directed, full cutoff, and fully shielded so light is not directly or indirectly visible from the beach, and
 - b. Turned off during nighttime in sea turtle nesting season, or if authorized by the *Beach Lighting Inspector* during sea turtle nesting season, shall only be allowed from 6:00am to 9:00pm, must be restricted to the minimal amount necessary, and shall incorporate all the standards of this Section, and
 - c. Mounted less than eight feet above the adjacent floor or deck, measured from the bottom of fixture, and
 - d. Restricted to the minimal number of foot-candles necessary to conform to the applicable construction safety regulations.
5. Handheld and other portable temporary lighting shall not be directed toward or used in a manner that disturbs sea turtles or other coastal wildlife.

SECTION ___-4. - COMPLIANCE AND ENFORCEMENT PROCEDURES

Sec. ___-4.1. - Beach Lighting Inspector

1. A position, known as the **City/County of _____** *Beach Lighting Inspector*, is hereby established.

Guidance: While the model creates a beach lighting inspector, local governments may choose to identify someone already on staff, such as a code enforcement officer, for the position. It is

most important that the designated individual receive appropriate training.

2. It shall be the duty of the City/County Manager to appoint the *Beach Lighting Inspector*. The *Beach Lighting Inspector* shall have the necessary training, technical knowledge, and resources to enable them to effectively carry out the duties of this office. The *Beach Lighting Inspector* may access resources provided by other local, state or federal agencies such as the *Sample Beach Lighting Survey Worksheet*, training, and other information available from the Florida Fish and Wildlife Conservation Commission.
3. The *Beach Lighting Inspector* shall be responsible for:
 - a. Inspecting the entire beach within the jurisdictional boundaries of the **City/County of _____** regularly during sea turtle nesting season to determine the extent of compliance with this Ordinance.
 - b. In the event of the finding of a violation at a particular public or private property, conducting further inspections at the property at any time beginning on the night after the deadline date given on the written notice of violation. These follow-up inspections shall continue until the lighting has been brought into compliance with this Ordinance.
 - c. *Beach Lighting Inspector* responsibilities may also include preparation of reports, issuance of non-compliance notices, outreach and education, supporting administrative actions before a review board or special magistrate, or attending building permit pre-application and pre-construction conferences.

Guidance: At minimum, night time lighting surveys and compliance inspections are recommended before and during sea turtle nesting season. Compliance inspections that are conducted frequently throughout the nesting season may be beneficial to local governments in identifying and addressing noncompliant lighting.

4. It shall be unlawful for any person to interfere with, or in any manner hinder the *Beach Lighting Inspector*, or any of their assistants, while in the discharge of their duties under the terms of this Ordinance.
5. It shall be unlawful for any person to knowingly conceal or disable any lighting on a property before it has been inspected by the *Beach Lighting Inspector*.

Sec. ___-4.2. - Notice of Violation

1. Upon finding any violation of this Ordinance, the *Beach Lighting Inspector* shall deliver a written notice of the violation of this Ordinance to the property owner and direct said owner to promptly remove or remediate lighting not in compliance with this Ordinance.
2. The time allowed for making the repairs shall be stated in the notice and should the responsible party neglect or refuse to remove or remediate non-compliance within the specified time stated in the notice, the party so offending shall commit a violation of this Ordinance and be penalized as provided in Subsection ___-4.3 of this Ordinance.

Sec. ___-4.3. - Penalties

1. Any person who takes any action or omission in violation of any provision of this Ordinance and fails to resolve such violation after proper notice is provided, shall be subject to a fine of up to \$ ___ per day per violation for initial violations, and \$ ___ per day per violation for repeat violations. All penalties incurred as a result of violation of this Ordinance shall continue to accrue until such violations are cured.
2. The **City/County of** _____ shall have the right to encumber such property in violation of this Ordinance with a lien for an amount equal to the total amount of fines owed at the time such lien is recorded.

Sec. ___-4.4. - Sea Turtle Fund

1. A *Sea Turtle Fund* is hereby established within the **City/County of** _____.
2. All funds collected as a result of the issuance of fines under Section 3 of this Part shall be deposited in the *Sea Turtle Fund*. The funds in this account shall be used for:
 - a. Assistance to property owners for the procurement of light systems equipment and materials that comply with this Ordinance and reduce the amount of artificial beach lighting,
 - b. Educational materials to inform the general public on the threats of artificial lighting to sea turtles, including but not limited to signs, door knockers, pamphlets, stickers, public service announcements, and other awareness campaigns, and
 - c. Equipment, materials and other resources supporting compliance assistance and enforcement by the *Beach Lighting Inspector*.
 - d. Other reasonable efforts to protect the sea turtle population within the **City/County of** _____, including but not limited to research and conservation projects.
3. The **City/County of** _____ may contribute funding from other sources into the *Sea Turtle Fund* for uses consistent with the purposes set forth above.

SECTION ___-5. - OTHER CLAUSES

Sec. ___-5.1. - Conflict with Other Ordinances

If this Ordinance conflicts with any other Ordinance or requirement of the **City/County of** _____, then this Ordinance shall control during sea turtle nesting season. Deviations from this Ordinance shall be subject to the variance procedures as established by this City/County.

Sec. ___-5.2. - Severability

If any Section or Subsection of this Ordinance is invalidated for any reason, the effected portion may be eliminated or modified to correct the reason of invalidation, if feasible without materially altering or negating the Ordinance Goals and the principles of sea turtle lighting.

Sec. ___-5.3. - Effective Date

The **City/County of** _____ Lighting Ordinance for Sea Turtle Protection shall become effective upon recommendation by _____ and approval by the _____.

Monday, June 10, 2024

Fellow Beach Stewardship Committee & City Staff members:

Please find for discussion the following proposed points to be added to a Dune Preservation section of the draft beach ordinance. This is not intended to replace the permit required language in the existing draft but rather highlight basic principles of Dune Protection and Preservation.

- Stay off the dune except on existing paths.
- With a permit from the city and FLDEP, install a wildlife friendly post and rope fence on the seaward side of the dune vegetation to prevent access to the dune.*
- With a permit from the city and FLDEP, beach path board walks and dune walk overs may be added.*
- Allow the removal of all non-native / invasive / aggressive plant species in the dune ecosystem.*
- Allow the planting of dune friendly plants within the dune ecosystem.*

The purpose of adding this language is to highlight and encourage these principles into actions for the long-term health of our dune ecosystems as well as resiliency of our community.

Respectfully,

Jon Stevens

*Please see the attached FLDEP guidelines also available on the FL DEP CCCL program webpage.



CCCL Post and Rope Guidelines

The state of Florida requires permits for post and rope barriers and other structures or activities seaward of the coastal construction control line (CCCL) under section 161.053, Florida Statutes, of the Beach and Shore Preservation Act and the CCCL Rule Chapter 62B-33, Florida Administrative Code (F.A.C).



Figure 1: Post and rope fence constructed to state of Florida CCCL specifications. This pedestrian barrier rerouted foot traffic that was trampling newly installed beach dune plants and creating footpaths through the dune. **Post and rope barriers are not to be run out onto the sandy beach and block lateral beach access.**

General Post and Rope Requirements

- A permit from the Department of Environmental Protection (DEP) is required prior to the installation of any post and rope structure or series of upright posts connected with line and serving as a barrier or fence seaward of a CCCL. Go to www.FloridaDEP.gov/CCCL for permit assistance and to learn [How to determine if your property is seaward of the CCCL using 'Map Direct'](#).
- Applicants for CCCL permits to install post and rope structures must own or control the property on which the structure is placed or have the property owner's approval to place the structure.
- Post and rope structures are installed immediately adjacent to dune vegetation in locations where they are expected to be both effective as pedestrian barriers and to meet CCCL regulatory requirements. Installation in these structures must be as far landward as practicable and follow the Sea Turtle Protection Measures contained within these guidelines.
- Post and rope must be of low impact, breakaway construction and use biodegradable materials when possible. Posts are recommended to be small diameter (3-inch to 4-inch), round, untreated wood poles embedded in sand a minimum of 2-feet (ft.) deep. Posts shall not be encased in concrete.
- Structures are to be installed in a way that does not alter dune topography, damage beach-dune vegetation, drive vehicles or other equipment across dunes, disturb marked sea turtle nests or known nest locations, obstruct public beach access (both to and along the beach) or damage adjacent properties. No trespass is authorized.
- Disturbance of the beach or dune ground surface caused during construction must be smoothed out to pre-project conditions. Native dune plants damaged during construction must be replaced and approved by DEP. Damaged post and rope structures must be repaired or removed.

*coastal construction questions? email cccl@dep.state.fl.us, call 850/245-2094
or look up a CCCL field inspector at www.FloridaDEP.gov/CCCL*

CCCL Post and Rope Guidelines (p. 2)

Sea Turtle Protection Measures

The Florida Fish and Wildlife Conservation Commission (FWC), Imperiled Species Management Section specifies sea turtle protection measures for post and rope permits issued by DEP and offers helpful sea turtle conservation information at <https://myfwc.com/wildlifehabitats/wildlife/sea-turtle/>. FWC staff provide consultation and specific sea turtle protection measures for DEP coastal construction permits for coastal construction projects.

CCCL post and rope permits are conditioned to provide the following sea turtle protection measures in addition to the standard permit conditions contained in coastal construction rule 62B-33.0155, F.A.C:

- Construction activities within sea turtle nesting habitat, including the entire sandy beach and frontal dune, must be minimized. Impacts to nesting habitat can be minimized by only installing post and rope barriers along pedestrian paths through the dunes and using signs to reduce foot traffic across the dune.
- Structures must be located as far landward on the sea turtle nesting beach as is possible. No posts are to be installed closer than 5 ft. to a seawall, revetment or dune scarp to avoid trapping nesting sea turtles between the post and the upland structure.
- Post and rope structures located on or seaward of a frontal dune or seaward of a seawall are to be arranged as follows and described in the Figure 2 diagram:
 - Posts must be spaced at least 7 ft. apart.
 - Ropes between posts must be tight and droop no closer than 3 feet above the ground.
- Operating, transporting or storing equipment or materials is not allowed seaward of a frontal dune or rigid coastal structure during sea turtle nesting season. In Brevard, Indian River, St. Lucie, Martin, Palm Beach and Broward counties the sea turtle nesting season is March 1 through October 31. In all other counties, the sea turtle nesting season is May 1 through October 31.

FWC staff can assist with conservation measures for other coastal wildlife, such as gopher tortoises, beach nesting shorebirds and beach mice potentially affected by post and rope installation projects. Contact FWC sea turtle program staff at 850/922-4330 or marineturtle@myfwc.com.

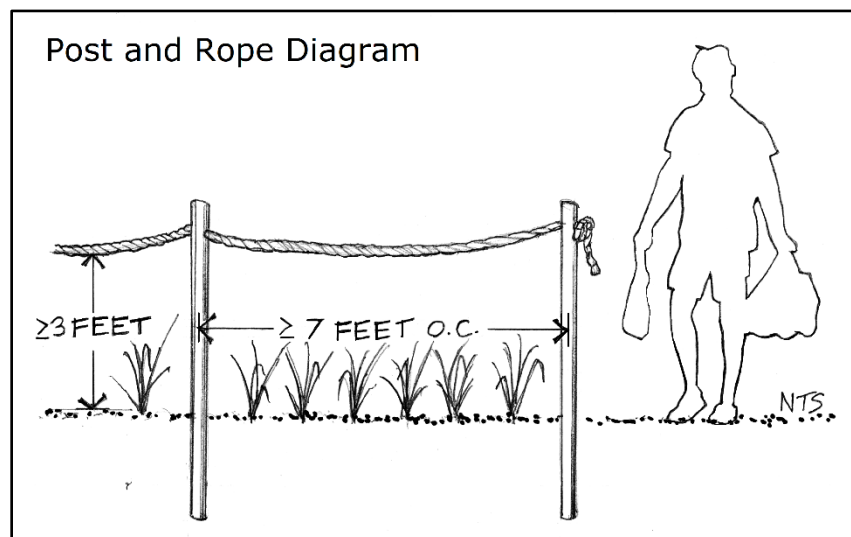


Figure 2: Post and rope fence diagram. Small diameter untreated wood posts are to be installed a minimum of 7-ft. apart and the rope or line strung tight between posts so that the sag in the line is at least 36-inches above the ground. Wood posts are embedded a minimum of 2-feet into the sand and not encased in concrete.

coastal construction questions? email cccl@dep.state.fl.us, call 850/245-2094
or look up a CCCL field inspector at www.FloridaDEP.gov/CCCL

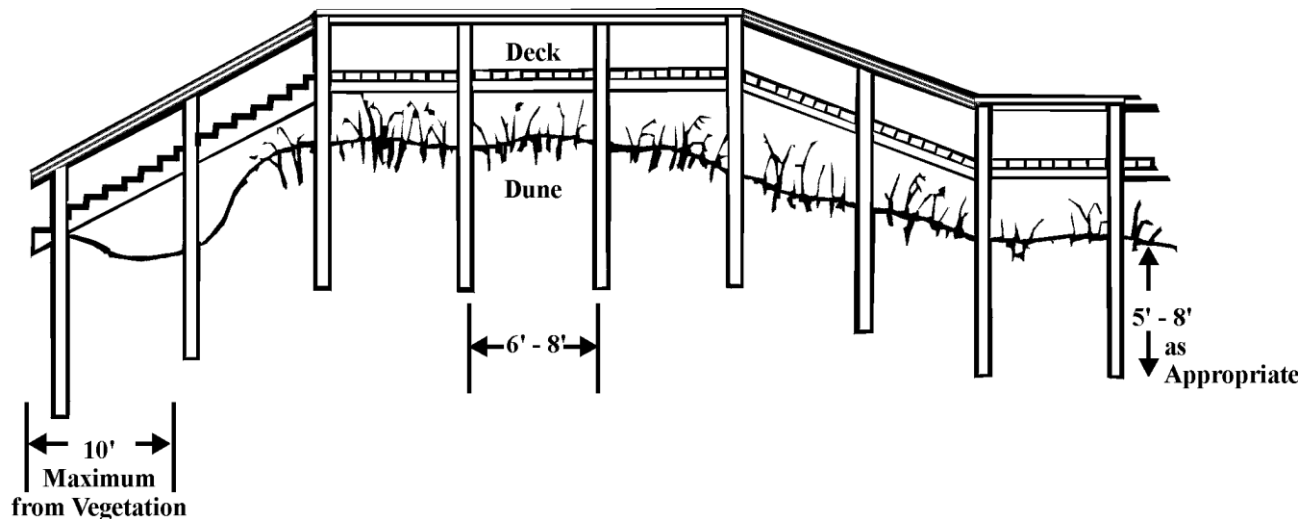


CCCL Dune Walkover Guidelines

On many of Florida's beaches, sand dunes and coastal vegetation provide significant protection to upland property, upland development, and the beach dune system. The Florida Department of Environmental Protection (DEP) encourages the design of beach access, including beach and dune walkovers, to protect the dune topography and dune vegetation from pedestrian traffic, allow for the natural recovery of damaged or eroded dunes and to not interfere with sea turtle nesting.

TYPICAL DUNE WALKOVER PROFILE

⇐ To the Beach



PERMIT REQUIREMENTS

A permit from DEP is required for construction of walkovers on most sandy beaches fronting on the open waters of the Atlantic Ocean or Gulf of Mexico. In areas where a Coastal Construction Control Line (CCCL) has been established pursuant to provisions of Section 161.053, Florida Statutes (F.S.), a permit is required for all excavation, construction, or other activities with the potential to cause beach erosion or damage coastal vegetation. On sandy shorelines where a CCCL line has not been established, a permit is required for construction activities within 50 feet of the mean high water line (see Section 161.052, F.S.).

Permits for walkovers contain standard conditions that require construction to be conducted in a manner that minimizes short-term disturbance to the dune system and existing vegetation. Replacing vegetation destroyed during construction with similar plants suitable for beach and dune stabilization is required. Only limited excavation for the placement of support posts is allowed, and walkovers cannot be constructed during the

marine turtle-nesting season, which extends May 1 through October 31 (except for Brevard through Dade counties, which extends March 1 through October 31).

GENERAL SITING GUIDELINES

The walkover must be located and designed to protect dune features, to minimize disturbance of native vegetation, to not obstruct lateral beach access and to minimize the amount of construction material that may become debris during a storm. Elevated walkovers are not required for all beach accesses, such as in sparsely vegetated, low profile dune areas where on-grade sand or shell paths are suitable for controlling foot traffic. Note that on-grade beach mats are considered to be structures that require CCCL permits. Walkovers are generally constructed over the frontal dune and perpendicular to the shoreline. Dune walkovers are designed to extend at least to the seaward toe of the frontal dune or the existing line of vegetation and are allowed no farther than 10 feet seaward of the vegetation. The optimum siting of the walkover structure can be determined by contacting a [CCCL field inspector](#).

GENERAL DESIGN GUIDELINES

Walkovers are designed to be minor, expendable structures that pose only minimal interference with coastal processes and generate minimal amounts of debris. Walkovers constructed across native beach and dune vegetation need to be post-supported and elevated a sufficient distance above the existing or proposed vegetation to allow for sand build-up and clearance above the vegetation. Stairways and ramps leading from the dune bluff or crest down to the beach need to completely span the seaward slope of the dune without installing posts into unstable slopes steeper than approximately 30 degrees. The structure must be designed to minimize the quantity of material used in construction, such as avoiding the use of vertical wood pickets, and reducing the length and width of construction on the beach.

Single family walkovers are not to exceed 4 feet in overall width and the support posts are not to be greater than 4-inch wide posts. Multi-family walkovers are not to exceed 6 feet in overall width and the support posts are not to be greater than 6-inch wide posts. Round posts are preferred to square posts. Support posts cannot be encased in concrete nor installed into dune slopes that are steeper than approximately 30 degrees. Support posts are to have a minimum 5 feet of soil penetration or embedment. Cross bracing is not required for most structures when following the designs in the document "*Beach/Dune Walkover Structures*," referenced at the end of this document. Local governments and property owners are advised to consult with a [CCCL Permit Manager](#) prior to requesting a permit for a walkover that contains switchbacks, long ramps or other features required to comply with the Americans with Disabilities Act Accessibility Guidelines.

WALKOVER ELEVATION GUIDELINES

Walkover heights vary as the structure crosses the beach/dune system. The ground cover changes from the uplands, commonly covered with woody scrub or coastal strand vegetation (saw palmetto/sea grape/scrub oaks), over a dune bluff or one or several dune crest(s), covered with either coastal strand or coastal grassland (sea oats/bitter panicum/marsh hay), down the slope to the dry sand beach, either uncovered bare escarpment or partially covered with beach/dune vegetation (railroad vine/sea rocket/sea oats). Design of the structure and height of the deck from the dune bluff or crest down to the beach also must be considered in setting the walkover elevation with the goal of minimizing the amount of material on the beach.

Walkover Elevations in Uplands. The upland environment of coastal scrub/coastal strand habitat is characterized by more stable soil conditions with less blowing sands and infrequent storm overwash events. The stable conditions allow for the development of a mature woody vegetation and saw palmetto dominated plant community. In addition to thick above ground stem and leaf vegetation between 5 and 15 feet in height,

this plant community has an extensive below ground woody root mat. Walkovers in these upland habitats need be elevated only a sufficient distance above the ground to avoid disturbance of the soil and root systems or cutting of low tree and palmetto trunks. An elevation of the stringers from 6" to 2'-0" above existing grade is expected to be sufficient in many cases. Walkover elevations crossing coastal wetlands within upland areas may require increased elevations. Elevation of the walkover above the leaf canopy is in most cases impractical in coastal scrub or coastal strand habitats where careful pruning needs to be limited to removal of only those aerial branches to create an open passage. Deck elevations need to be no higher than five feet above grade to provide clearance for vegetation, and the movement of sand, water and sea turtles underneath the structure.

Walkover Elevations over Bluffs. The low stringer elevation recommended for uplands can be carried to an eroded bluff line. This will reduce the length of a ramp or walkover down to the beach. Again the objective the walkover elevation is to reduce damage to coastal scrub soils and root systems.

Walkover Elevations over Dune Crests. Dune environments are characterized by mobile sands subject to storm effects (which lower grade elevations) and wind effects (which can raise elevation as sand is trapped). Dunes are dominated by coastal grassland plants adapted to the dynamic environment. These include sea oats, bitter panicum, and little bluestem. Walkovers sited within active dune systems are required to be elevated sufficiently to allow for sand movement and growth of vegetation. Walkover designs published in "Beach/Dune Walkover Structures" referenced below specify a 3'-10" minimum clearance from existing grade to the bottom of the stringers of an up to 6-foot wide (overall dimension) multi-family or public beach access structures, and a 3'-0" minimum clearance to the top of the deck for an up to 4-foot wide single family structures.

Walkover Elevations on Seaward Dune or Bluff Slopes. The elevation of the walkover at the dune crest and the distance of the seaward terminus from the water's edge determine the height of the steps or ramps crossing the seaward slope. The design objective is to get the structure down to the beach in as short a shore-normal (perpendicular to the shoreline) distance as possible while reducing the shore-parallel coverage of the slope. Department guidelines require that the seaward terminus of the structure be no farther seaward than 10 feet from the line of permanent beach dune vegetation or the toe of the frontal dune. Reducing the seaward encroachment and shore-parallel width decreases the potential for storms interacting with the structure, occupation of sea turtle nesting habitat by the structure, and interference with lateral public beach access. Walkovers designed for the Americans with Disabilities Act often increase the length of walkover ramps on the beach. This requires the need for a site specific review for environmental impacts. The burial of the ramp or step terminus a minimum amount (0.5 to 1.0 feet)-foot below grade may allow for use of the walkover after some lowering of the beach elevation from minor storms. However, placement of this terminus below the depth of a post storm beach profile is discouraged as this portion of the walkover will most likely have been damaged by larger storms and to have interfered with coastal processes.

On Grade Access. Elevated walkovers are not necessary in all site conditions and use situations. Where dune development is minimal, beach dune vegetation is sparse and the use infrequent, on-grade footpaths may be preferred. The Department discourages solid concrete walks and footpath surfaces such as stepping stones that create debris or missiles. Other surfaces such as geotextile fabrics, cabled wood planks, or shell require a case by case review. No permanent path surfaces are allowed farther seaward than 10-feet from the dune or vegetation line or within sea turtle nesting habitat.

ALIGNMENT

Wood Walkovers. Elevated wood walkovers designed for reducing erosion of high dunes are recommended to be aligned perpendicular to the shore to reduce the shore-parallel extent of structure subject to wave attack and the amount of material used in construction.

On Grade Access. Sand paths, beach mats and low elevation walkovers crossing low dune systems subject to more frequent flooding are recommended to be layed out at an angle to the dune and shoreline. Diagonal access routes to the beach provide less of a direct path for storm waves to travel inland, may have a “self-healing” function that fills in during storm events, and are expected to provide a less direct route for ebb surge waters to scour channels as the storm’s floodwaters return toward the ocean.

WALKOVER LIGHTING GUIDELINES

Elevated Walkovers. Lights are generally prohibited on dune walkovers or elevated boardwalks and may only be considered under the following conditions: the lighting is required for purposes of building code compliance; light fixtures must be located landward of the frontal or primary dune, whichever is further landward; lighting must be long wavelength, downward directed, full cutoff and fully shielded and cannot be directly, indirectly, or cumulatively visible from the beach.

Beach Access Points. Lighting of beach access routes may be located and configured only for the minimal illumination of pedestrian paths landward of the beach and frontal dunes. All lighting of beach access points must be long wavelength, downward directed, full cutoff and fully shielded and cannot be directly, indirectly, or cumulatively visible from the beach.

OTHER CONSTRUCTION

Decks and Platforms. Decks and platforms are not allowed on the frontal dune and may be attached to the walkover in the dune system if landward of the frontal dune crest and cantilevered from an elevated, post supported walkover otherwise following these guidelines. Landward of the dune or bluff, cantilevered decks can have a maximum two-foot cantilever on each side of a single family walkover for a maximum 8-foot wide deck as measured in the shore-parallel dimension.

Roofs. Roofs and other permanent coverings are generally prohibited on walkovers or attached decks and platforms except where gazebos and other non-beach access related structures are allowable landward of the dune system.

Showers and Waterlines. Pipes and fixtures for showers, footbaths or fish cleaning stations may be run to the landward extent of the walkover, not out onto the beach or frontal dune. Water systems are recommended to include shut off valves in the uplands that can prevent uncontrolled discharges which can erode the beach or dune sand or flood sea turtle nests.

Railings. As minor, frangible or breakaway structures, dune walkovers are to be designed with the minimum amount of wood and other solid material needed to provide access through the dune system. Open railings instead of pickets and use of cables or other materials to prevent falls as required by building code for safety can minimize the amount of materials placed in the dune system that may become debris or missiles in storm events.

REFERENCES

Beach/Dune Walkover Structures, SUSF-SG-76 by Todd L. Walton, Jr., and Thomas C. Skinner. Published by the Marine Advisory Program of the Florida Cooperative Extension Service and the Florida Sea Grant, March, 1983.

Coastal Construction Manual, Volume III: Principles and Practices of Planning, Siting, Designing, Constructing, and Maintaining Buildings in Coastal Areas, Appendix I, Dune Walkover Guidance. FEMA.



CCCL Dune Plant Maintenance Guidelines

These guidelines provide best management practices for maintenance of seagrapes and other salt tolerant dune plants protected seaward of a coastal construction control line by state law 161.053 (2)(a), Florida Statutes.

Beach – Dune Vegetation

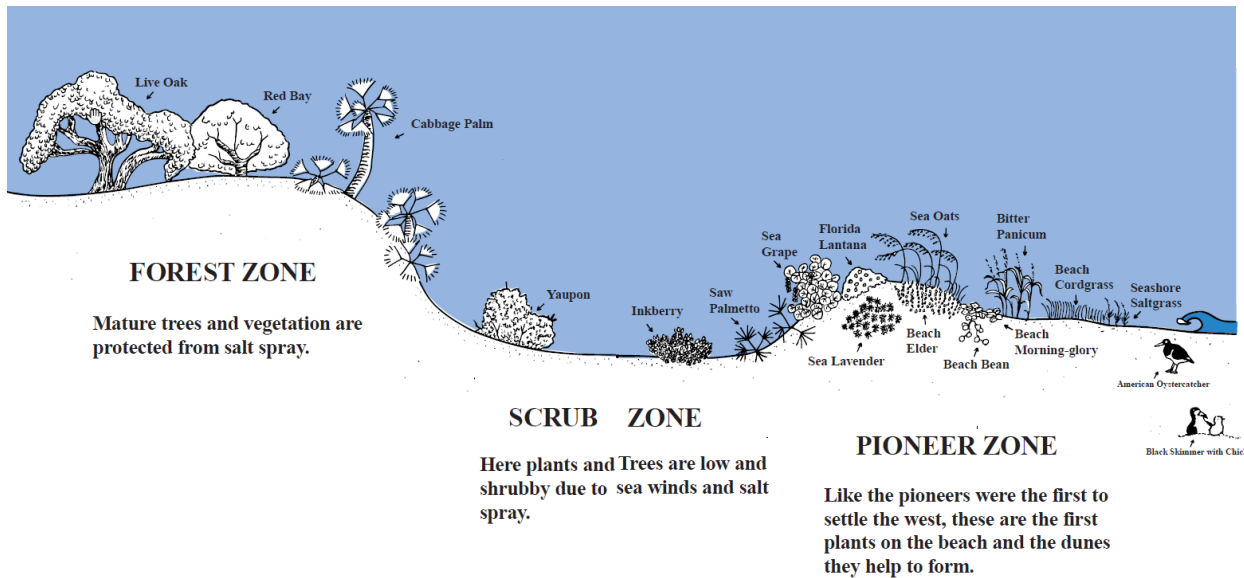


Figure 1: Diagram of pioneer, scrub (or strand) and forest zones of dunes within a typical Florida beach and dune system.

Sea oats, seagrapes and other plants growing on Florida dunes give significant benefits to beaches, dunes, upland properties and wildlife. Salt tolerant dune plants:

- build protective dunes by trapping and stabilizing wind-blown beach sand,
- reduce erosion losses by wind and storms,
- provide a buffer against storm surges and salt spray,
- provide shelter for wildlife, and
- block light pollution for nesting and hatchling sea turtles.

Dune plants are resilient and adapted to survive storms and grow back through natural recovery processes. At the same time, dune plants can be easily damaged by construction and other human activities and require much longer recovery times. It is important to conduct dune plant maintenance so that the plants are not permanently damaged and sea turtles and dune systems are protected.

What are Dune Plants?

Dune plants are those native trees, shrubs, grasses, groundcovers and other plants found in beach dune, coastal berm, coastal grassland, coastal strand and maritime hammock natural communities as described by the Florida Natural Areas Inventory (see [Guide to the Natural Communities of Florida – 2010 Edition](#)). Native plants are those species documented as native or endemic in the [Atlas of Florida Vascular Plants](#) maintained by the Institute for Systematic Botany. Nuisance or Invasive Exotic Plant Species are those species listed in the Florida Exotic Pest Plant Council's [List of Category I and II Invasive Species](#). Plants that have been intentionally planted or installed, or inadvertently introduced into the dune system for purposes other than for dune restoration are considered to be ornamental or landscape plantings.

What are the State Laws related to Dune Plant Maintenance?

Beach-dune plant damage or removal located seaward of a state of Florida coastal construction control line (CCCL) is regulated under section 161.053, Florida Statutes (F.S.). Additional protections for sea oats, *Uniola paniculata*, and seagrapes, *Coccoloba uvifera*, are found in section 161.242, F.S. CCCL regulations do not supersede more stringent requirements of other laws or jurisdictions that may be in effect, or the protection of endangered, threatened or commercially exploited plants regulated under Chapter 581 of the Florida Statutes, and Rule Chapter 5B-40, of the Florida Administrative Code.

In recognition of the storm buffer services of dune plants, Florida law states that no person, firm, corporation, or governmental agency shall damage or cause to be damaged sand dunes or the vegetation growing on them without a permit from the Florida Department of Environmental Protection (FDEP) (subparagraph 161.053(2)(a), Florida Statutes). Consequently, FDEP Coastal Construction Control Line Program (CCCL) rules in Chapter 62B-33, Florida Administrative Code, protect these important native salt-tolerant dune plants from damage. On dune systems seaward of the Department's Coastal Construction Control Line, property owners or their agents cannot cut down or damage beach dune plants without a CCCL permit. Landscape plant maintenance activities that target ornamental or introduced non-native species or do not damage native beach-dune vegetation or involve excavation do not require CCCL permits and are exempt from CCCL permit application requirements under subparagraph 161.053(11)(c)2, F.S.

What “Damages” Dune Plants?

Damage to vegetation refers to a material reduction in the health of plant from trampling, crushing, chopping, breaking, digging up, or excessive cutting of roots, stems, trunks, branches or leaves of beach dune plants naturally occurring or planted on-site for dune enhancement seaward of a CCCL. Excessive cutting means the removal of roots, branches, stems and leaves in exceedance of accepted horticultural practices, such as the standards published in ANSI A300 Part 1: Tree, Shrub and other Woody Plant Maintenance -Standard Practices, Pruning. Tree and landscape maintenance practices recognize exceptions to the standards and that certain coastal plants adapted to recover from breakage by damaging tropical storm force winds, such as seagrape, *Coccoloba uvifera*, are tolerant of heavy pruning or coppicing. Damage to beach and dune vegetation can be avoided, minimized or mitigated through employment of arborists and other landscape professionals and when following best management practices tailored for the unique physical conditions of coastal dune environments.

What Permits, if any, are Required to Cut Dune Vegetation?

Cutting dune vegetation seaward of a coastal construction control line requires a CCCL permit unless the activity qualifies as a minor activity determined by the department not to have an adverse effect on the coastal system, such as “maintenance of existing beach-dune vegetation” exempted in state law. Vegetation maintenance that does not damage native dune plants includes trimming, shearing, pruning, dead heading and other accepted horticultural practices, and does not require a CCCL permit pursuant to section 161.053(11), F.S. An exemption of the work from CCCL permitting requirements does not shield the property owner from his or her responsibility for following other laws or from enforcement action taken by other local, state, or federal agencies. Furthermore, proper arboricultural and horticultural practices must be followed to ensure that the native beach-dune plants are not damaged or destroyed from the maintenance. Trespass onto another’s property to remove vegetation without the property owner’s approval is also not allowed.



Figure 2: Sea oats, *Uniola paniculata*, building a dune by trapping and stabilizing windblown beach sand.

CCCL staff are available to assist property owners in determining if the dune maintenance project is exempt, or if not exempt, in processing the proper CCCL permit. CCCL field inspectors can schedule site visits to meet on the property, discuss projects over the phone, and issue CCCL Field Permits as needed. Additionally, property owners can send dune maintenance project information (eg. address, description of work, photographs and plans) to a CCCL permit manager in a consultation request emailed to cccl@dep.state.fl.us. The permit manager can assist with the processing of a CCCL Individual Permit application as needed. Both CCCL field inspector and permit manager contact information is located at the FDEP [CCCL webpage](#) or by calling 850/245-2094 and asking for the CCCL staff member assigned to the county of the project.

General Dune Plant Maintenance Guidance

- Work is to be conducted in a way that does not alter or damage dune topography or beach-dune vegetation, require new beach access, disturb marked sea turtle nests or known nest locations, obstruct public access, cause excavation of the ground or damage adjacent properties.
- Any disturbance of the beach or soil surface must be restored to a stable, pre-work condition.
- Removal of beachfront vegetation must not result in the increase of the visibility of artificial light from the beach, nor additional exposure of salt-sensitive plants or property to increased salt spray.
- Vegetation maintenance, trimming, or removal requires the approval of the property owner or if on public property, the approval of the responsible government resource management agency.
- Native dune plants damaged by unauthorized maintenance activities must be replaced to the approval of the Department.



Property owners and others maintaining native vegetation seaward of the Coastal Construction Control Line must consider possible harm to sea turtles. Removal of beachfront vegetation increases the potential for disorientation and subsequent injury or mortality of hatchling sea turtles, which are attracted to light. Pruning or trimming removes vegetation from the canopy that often blocks lights from shining on the beach and thus protects sea turtle nesting habitat. Vegetation maintenance that increases lighting of the beach must be in compliance with section 379.2431, Florida Statutes, "Marine Turtle Protection Act." Information on lighting issues is provided in the publication "Sea Grape Trimming and Sea Turtles," available on the CCCL webpage or by visiting the Florida Fish and Wildlife Conservation Commission sea turtle conservation program [website](#). The Florida Fish and Wildlife Conservation Commission, Imperiled Species Management Section can be reached at 850/922-4330 or marineturtle@myfwc.com.

- If reducing the tree crown or canopy of the dune vegetation, the property owner must evaluate existing or potential sources of light visible from the beach and take appropriate measures to eliminate the possibility of increased light cast on the nesting beach. Before cutting down vegetation seaward of a beach house, property owners can protect sea turtle nesting habitat by replacing light fixtures that are visible from the beach with shielded "can" type or other fixtures.
- Operation, transportation, or storage of equipment or materials, including skid steers, cherry pickers and other equipment on the beach or frontal dune must be scheduled outside sea turtle nesting season, or coordinated with CCCL and FWC staff if proposed during nesting season. This may require engaging the services of a state permitted biologist to ensure that proposed activities avoid all sea turtle nesting, nests and hatchlings.

References

Guide to the Natural Communities of Florida – [2010 Edition](#).

Atlas of Florida Vascular Plants [website](#) maintained by the Institute of Systematic Botany

Florida Exotic Pest Plant Council's [List of Category I and II Invasive Species](#)

Florida Beach and Shore Preservation Act, Chapter 161, Florida Statutes, (go to [Online Sunshine](#))

ANSI A300 Pruning Standard – Part 1 "Tree, Shrub, and Other Woody Plant Management – Standard Practices (Pruning)"; American National Standards Institute.

Coastal Construction Control Line Program, FDEP. (see [website](#))

Coastal Construction Control Line Program

Florida Department of Environmental Protection

Office of Resilience and Coastal Protection

Bob Martinez Center, Suite 505

2600 Blair Stone Road, MS 3522

Tallahassee, Florida 32399-2400

Email: cccl@dep.state.fl.us

Website: www.FloridaDEP.gov/CCCL

CCCL Dune Plant Maintenance Guidelines

March 2022

page 4

FISC List Definitions*:

Native—A species that occurs naturally in Florida.

Nonnative—A species that does not occur naturally in Florida.

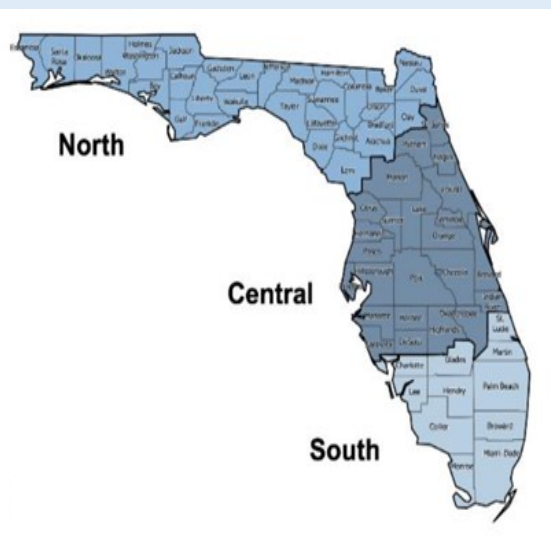
Invasive—A species that (a) is nonnative to Florida, (b) was introduced by humans (intentionally or unintentionally), and (c) does or can cause environmental harm.**

*adapted from: Iannone III, B. V., et al. (2020). Invasive Species Terminology: Standardizing for Stakeholder Education. Journal of Extension, 58(3), 27.

**for the purposes of this list, economic and human harm were not considered.

Category I—Invasive plants that are altering native plant communities by displacing native species, changing community structures or ecological functions, or hybridizing with natives. This definition does not rely on the economic severity or geographic range of the problem, but on the documented ecological damage caused.

Category II— Invasive plants that have increased in abundance or frequency but have not yet altered Florida plant communities to the extent shown by Category I species. These species may become Category I if ecological damage is demonstrated.



Zone: In the list, **N** = north, **C** = central, **S** = south, referring to each species' general distribution in regions of Florida (not its potential range in the state).



Formerly
Florida Exotic Pest Plant Council
(FLEPPC)

For more information on
invasive plants
including links to related
web pages, visit:

[floridainvasivespecies.org](http://www.floridainvasivespecies.org)

FISC also publishes a
Watch List
which can be found on the website

The 2023 list was prepared by
the FISC Plant List Committee

Dennis Giardina, Chair, 2017-2023, Florida Fish and Wildlife Conservation Commission,
dennis.giardina@myfwc.com

Alan Franck, University of Florida Herbarium,
francka@floridamuseum.ufl.edu

Roger L. Hammer, Retired Naturalist and Author,
kaskazi44@comcast.net

Mark Kiser, Florida Forest Service, mark.kiser@fdacs.gov

John Kunzer, Florida Fish and Wildlife Conservation Commission, john.kunzer@myfwc.com

James Lange, Smart-Science, Inc.,
jlange@smart-sciences.com

Kenneth Langeland, Professor Emeritus, University of Florida/IFAS, Agronomy Department, gator8@ufl.edu

Deah Lieurance University of Florida/IFAS, Agronomy Department

Chris Lockhart, Habitats Specialists Inc.,
chris@lockharts.org

Jean McCollom, Natural Ecosystems,
swampjeanm@outlook.com

Gil Nelson, Professor Emeritus, Florida State University/
iDigBio, gil@gilnelson.com

Erick Revuelta, Bio-tech Consulting, Inc.,
erick@bio-techconsulting.com

Veronica Runge, City of Sanibel,
veronica.runge@mysanibel.com

Dexter Sowell, Florida State University, FNAI,
dsowell@fnai.fsu.edu

Jessica Spencer, US Army Corps of Engineers,
jessica.e.spencer@usace.army.mil

Elena Suarez, Broward County Florida Parks and Recreation,
casuarez@broward.org

Richard P. Wunderlin, Professor Emeritus, University of South Florida,
rwunder@cas.usf.edu

Florida Invasive Species Council's 2023 List of Invasive Plant Species

The mission of the Florida Invasive Species Council is to reduce the impacts of invasive plants in Florida through the exchange of scientific, educational, and technical information.

Note: The FISC List of Invasive Plant Species is not a regulatory list. Only those plants listed as Federal Noxious Weeds, Florida Noxious Weeds, Florida Prohibited Aquatic Plants, or in local ordinances are regulated by law.

Purpose of the List

To provide a list of plants determined by the Florida Invasive Species Council to be invasive in natural areas of Florida and routinely update the list based upon information of newly identified occurrences and changes in distribution over time. Also, to focus attention on:

- Adverse effects invasive plants have on Florida's biodiversity and native plant communities,
- Habitat losses in natural areas from invasive plant infestations,
- Impacts on endangered species via habitat loss and alteration,
- Needs for invasive plant management,
- Environmental impacts of these plants (e.g. increased wildfires or flooding in certain areas),
- Changes in the severity of different invasive plant infestations over time,
- Providing information to help managers set priorities for research and control programs.

www.floridainvasivespecies.org

Citation example: FISC 2023 List of Invasive Plant Species. Florida Invasive Species Council. <https://www.floridainvasivespecies.org/>.

FISC Category I¹

Scientific Name	Common Name	Zone	Scientific Name	Common Name	Zone
<i>Abrus precatorius</i>	rosary pea	C, S	<i>Manilkara zapota</i>	sapodilla	S
<i>Acacia auriculiformis</i>	earleaf acacia	C, S	<i>Melaleuca quinquenervia</i>	punktree; melaleuca	C, S
<i>Albizia julibrissin</i>	silktree; mimosa	N, C	<i>Melinis repens</i>	rose natalgrass	N, C, S
<i>Albizia lebbek</i>	woman's tongue	C, S	<i>Microsorium grossum</i>	serpent fern; wart fern	S
<i>Ardisia crenata</i>	coral ardisia; scratchthroat	N, C, S	<i>(Phymatosorus scolopendria)</i>		
<i>Ardisia elliptica</i>	shoebutton ardisia	C, S	<i>Microstegium vimineum</i>	Nepalese browntop; Japanese	N
<i>Asparagus aethiopicus</i>	Sprenger's asparagus-fern	N, C, S	<i>Mimosa pigra</i>	black mimosa; catclaw mimosa	C, S
<i>Bauhinia variegata</i>	orchid tree; mountain ebony	C, S	<i>Nandina domestica</i>	sacred bamboo; heavenly bamboo	N, C
<i>Bischofia javanica</i>	Javanese bishopwood	C, S	<i>Nephrolepis brownii</i>	Asian sword fern	C, S
<i>Calophyllum antillanum</i>	santa maria; galba; Antilles calophyllum	S	<i>Nephrolepis cordifolia</i>	tuberous sword fern	N, C, S
<i>Casuarina equisetifolia</i>	Australian-pine; horsetail casuarina	N, C, S	<i>Neyraudia reynaudiana</i>	Burma reed; silkreed	S
<i>Casuarina glauca</i>	gray sheoak; suckering Australian-pine	N, C, S	<i>Nymphoides cristata</i>	crested floatingheart	C, S
<i>Cenchrus purpureus (Pennisetum purpureum)</i>	elephantgrass; napiergrass	N, C, S	<i>Paederia cruddasiana</i>	sewervine	S
<i>Cinnamomum camphora</i>	camphortree	N, C, S	<i>Paederia foetida</i>	skunkvine	N, C, S
<i>Colocasia esculenta</i>	wild taro; dasheen; coco yam	N, C, S	<i>Panicum repens</i>	torpedograss	N, C, S
<i>Colubrina asiatica</i>	latherleaf; Asian nakedwood	C, S	<i>Pistia stratiotes</i>	water-lettuce	N, C, S
<i>Cupaniopsis anacardioides</i>	carrotwood	C, S	<i>Psidium cattleianum</i>	strawberry guava	C, S
<i>Cyperus blepharoleptos*</i>	Cuban bulrush	N, C, S	<i>Psidium guajava</i>	guava	C, S
<i>Deparia petersenii</i>	Japanese false spleenwort	N, C	<i>Pueraria montana var. lobata</i>	kudzu	N, C, S
<i>Dioscorea alata</i>	white yam; winged yam; water yam	N, C, S	<i>Rhodomyrtus tomentosa</i>	rose myrtle; downy rose-myrtle	C, S
<i>Dioscorea bulbifera</i>	air-potato	N, C, S	<i>Ruellia simplex</i>	Britton's wild petunia; Mexican petunia	N, C, S
<i>Dolichandra unguis-cati (Macfadyena unguis-cati)</i>	catclaw vine	N, C, S	<i>Salvinia minima</i>	water spangles	N, C, S
<i>Eichhornia crassipes</i>	common water-hyacinth	N, C, S	<i>Scaevola taccada</i>	beach naupaka	N, C, S
<i>Eugenia uniflora</i>	Surinam cherry	C, S	<i>Schinus terebinthifolia</i>	Brazilian pepper	N, C, S
<i>Ficus microcarpa</i> ²	Indian laurel fig	C, S	<i>Scleria eggersiana*</i>	Eggers nutrush	S
<i>Heptapleurum actinophyllum (Schefflera actinophylla)</i>	Australian umbrella tree; octopus tree	C, S	<i>Scleria lacustris</i>	Wright's nutrush; lakeshore nutrush	C, S
<i>Hydrilla verticillata</i>	waterthyme; hydrilla	N, C, S	<i>Scleria microcarpa</i>	Tropical nutrush	C, S
<i>Hydrophila polysperma</i>	Indian swampweed; green hygro	N, C, S	<i>Senna pendula var. glabrata</i>	Christmas cassia; valamuerto	C, S
<i>Hymenachne amplexicaulis</i>	trompetilla; West Indian marshgrass	N, C, S	<i>Solanum tampicense</i>	wetland nightshade; aquatic soda apple	C, S
<i>Imperata cylindrica</i>	cogongrass	N, C, S	<i>Solanum viarum</i>	Tropical soda apple	N, C, S
<i>Ipomoea aquatica</i>	water-spinach	N, C, S	<i>Sporobolus jacquemontii</i>	West Indian dropseed; giant smutgrass	N, C, S
<i>Jasminum dichotomum</i>	Gold Coast jasmine	C, S	<i>Syngonium podophyllum</i>	arrowhead vine; American evergreen	N, C, S
<i>Jasminum fluminense</i>	Brazilian jasmine; jazmin de trapo; corky-stemmed jasmine	C, S	<i>Syzygium cumini</i>	Java plum	C, S
<i>Lantana strigocamara (Lantana camara)</i>	lantana; shrubverbena	N, C, S	<i>Tectaria incisa</i>	incised halberd fern	S
<i>Ligustrum lucidum</i>	glossy privet	N, C	<i>Thelypteris opulenta (Ambloventum opulentum)</i>	jeweled maiden fern	S
<i>Ligustrum sinense</i>	Chinese privet	N, C, S	<i>Thespesia populnea</i>	portia tree; seaside mahoe	C, S
<i>Lonicera japonica</i>	Japanese honeysuckle	N, C, S	<i>Tradescantia fluminensis</i>	small-leaf spiderwort	N, C, S
<i>Ludwigia peruviana</i>	Peruvian primrosewillow	N, C, S	<i>Tradescantia spathacea*</i>	Moses-in-the-cradle; oyster-plant; boatlily	C, S
<i>Lummitzera racemosa</i>	lumitzera	S	<i>Triadica sebifera (Sapium sebiferum)</i>	popcomtree; Chinese tallow tree	N, C, S
<i>Luziola subintegra</i>	Tropical American watergrass	S	<i>Urena lobata</i>	caesarweed	N, C, S
<i>Lygodium japonicum</i>	Japanese dimbing fern	N, C, S	<i>Urochloa mutica</i>	paragrass	N, C, S
<i>Lygodium microphyllum</i>	small-leaf dimbing fern; Old World climbing fern	N, C, S	<i>Vitex rotundifolia</i>	beach vitex; roundleaf chastetree	N, C

¹ Plant names are those published in the Atlas of Florida Plants on 3/4/23 (<http://florida.plantatlas.usf.edu/>). Some frequently used common names are added.

² Does not include *Ficus microcarpa* subsp. *fuyuensis*, which is sold as "green island Ficus"

³ Does not include the native endemic *Spermacoce neoterminalis*.

* Plants added to the FISC List of Invasive Plant Species in 2023 are in bold print.

FISC Category II¹

Scientific Name	Common Name	Zone	Scientific Name	Common Name	Zone
<i>Adenantha pavonina</i>	red beadtree; red sandalwood	S	<i>Limnophila sessiliflora</i>	Asian marshweed	N, C, S
<i>Agave sisalana</i>	sisal hemp	C, S	<i>Livistona chinensis</i>	Chinese fan palm	C, S
<i>Alstonia macrophylla</i>	deviltree	S	<i>Macroptilium lathyroides</i>	wild bushbean	N, C, S
<i>Alternanthera philoxeroides</i>	alligatorweed	N, C, S	<i>Melaleuca viminalis (Callistemon viminalis)</i>	bottlebrush	C, S
<i>Antigonon leptopus</i>	coral vine; queen's jewels	N, C, S	<i>Melia azedarach</i>	Chinaberrytree	N, C, S
<i>Ardisia japonica</i>	Japanese ardisia	N	<i>Melinis minutiflora</i>	molassesgrass	C, S
<i>Aristolochia elegans (Aristolochia littoralis)</i>	elegant dutchman's-pipe; calico flower	N, C, S	<i>Mikania micrantha</i>	mile-a-minute	S
<i>Asystasia gangetica</i>	Chinese violet; Ganges primrose	C, S	<i>Momordica charantia</i>	balsampear	N, C, S
<i>Begonia cucullata</i>	wax begonia; club begonia	N, C, S	<i>Murraya paniculata</i>	orange jessamine	S
<i>Broussonetia papyrifera</i>	paper mulberry	N, C, S	<i>Myriophyllum spicatum</i>	Eurasian watermilfoil	N, C, S
<i>Bruguiera gymnorhiza</i>	large-leafed orange mangrove	S	<i>Passiflora biflora</i>	twolobe passionflower	S
<i>Callisia fragrans</i>	basket plant; inch plant	C, S	<i>Phoenix reclinata</i>	Senegal date palm	C, S
<i>Casuarina cunninghamiana</i>	river sheoak	C, S	<i>Phyllostachys aurea</i>	golden bamboo	N, C
<i>Cecropia palmata</i>	trumpet tree	S	<i>Pittosporum pentandrum</i>	Taiwanese cheesewood	S
<i>Cenchrus polystachios (Pennisetum polystachion)</i>	West Indian pennisetum; missiongrass	C, S	<i>Platycerium bifurcatum</i>	staghorn fern	C, S
<i>Cenchrus setaceus (Pennisetum setaceum)</i>	fountaingrass	N, C, S	<i>Praxelis clematidea</i>	praxelis	C
<i>Cestrum diurnum</i>	dayflowering jessamine	C, S	<i>Pteris tripartita*</i>	giant brake	C, S
<i>Chamaedorea seifrizii</i>	bamboo palm	C, S	<i>Pteris vittata</i>	Chinese ladder brake	N, C, S
<i>Clematis terniflora</i>	sweet autumn virginsbower; sweet autumn clematis	N, C	<i>Ptychosperma elegans</i>	Alexander palm; solitaire palm	S
<i>Cocos nucifera</i>	coconut palm	S	<i>Richardia grandiflora</i>	largeflower Mexican clover	N, C, S
<i>Crassocephalum crepidioides</i>	redflower ragleaf	N, C, S	<i>Ricinus communis</i>	castorbean	N, C, S
<i>Cryptostegia madagascariensis</i>	Madagascar rubbervine	C, S	<i>Rotala rotundifolia</i>	dwarf rotala; roundleaf toothcup	S
<i>Cyperus involucratus</i>	umbrella plant	N, C, S	<i>Ruellia blechum</i>	Brown's blechum; green shrimp plant	N, C, S
<i>Cyperus proflifer</i>	dwarf papyrus; miniature flatsedge	C, S	<i>Selenicereus pteranthus*</i>	princess-of-the-night	C, S
<i>Dactyloctenium aegyptium</i>	Durban crowfootgrass	N, C, S	<i>Sesbania punicea</i>	rattlebox	N, C, S
<i>Dalbergia sissoo</i>	Indian rosewood; sissoo	C, S	<i>Sida planicaulis</i>	flatstem sida; mata-pasto	C, S
<i>Dalechampia scandens</i>	spurgecreeper	C, S	<i>Solanum diphyllum</i>	twolobe nightshade	N, C, S
<i>Distimake tuberosus (Merremia tuberosa)</i>	Spanish arborvine; yellow morning-glory; wood rose	C, S	<i>Solanum torvum</i>	turkeyberry	N, C, S
<i>Dracaena hyacinthoides (Sansevieria hyacinthoides)</i>	bowstring hemp; mother-in-law's tongue	C, S	<i>Spermacoce verticillata</i> ³	shrubby false buttonweed	N, C, S
<i>Elaeagnus pungens</i>	silverthorn; thorny olive	N, C, S	<i>Sphagneticola trilobata (Wedelia triloba)</i>	creeping oxeye; wedelia	N, C, S
<i>Elaeagnus umbellata</i>	silverberry; autumn olive	N	<i>Stachytarpheta cayennensis</i>	nettleleaf velvetberry	S
<i>Epipremnum pinnatum</i>	golden pothos	C, S	<i>Syagrus romanzoffiana</i>	queen palm	C, S
<i>Eulophia graminea</i>	Chinese crown orchid	N, C, S	<i>Syzygium jambos</i>	Malabar plum; rose apple	N, C, S
<i>Ficus altissima</i>	council tree	C, S	<i>Tabebuia heterophylla*</i>	pink tabebuia; white cedar	S
<i>Flacourtia indica</i>	Governor's plum	S	<i>Talipariti tiliaceum var. tiliaceum</i>	sea hibiscus; mahoe	C, S
<i>Hemarthria altissima</i>	limpograss	C, S	<i>Terminalia catappa</i>	West Indian almond; tropical almond; sea almond	C, S
<i>Heteropterys brachiata</i>	Beechey's withe; redwing	S	<i>Terminalia muelleri</i>	Australian almond	C, S
<i>Hyparrhenia rufa</i>	jaragua	N, C, S	<i>Thelypteris dentata (Christella dentata)*</i>	downy maiden fern; downy shield fern	N, C, S
<i>Ipomoea carnea subsp. fistulosa</i>	bush morning-glory	C, S	<i>Tribulus cistoides</i>	burr nut; Jamaican feverplant; puncture vine	N, C, S
<i>Kalanchoe pinnata</i>	cathedral bells; life plant	C, S	<i>Urochloa maxima (Panicum maximum)</i>	Guineagrass	N, C, S
<i>Kalanchoe x houghtonii</i>	mother-of-millions	N, C, S	<i>Vernicia fordii</i>	tung oil tree	N, C, S
<i>Koeleruteria elegans subsp. formosana</i>	flamegold rain tree	N, C, S	<i>Vitex trifolia</i>	simpleleaf chastetree	C, S
<i>Landoltia punctata (Spirodela punctata)</i>	dotted duckweed	N, C, S	<i>Washingtonia robusta</i>	Washington fan palm	C, S
<i>Leucaena leucocephala</i>	white leadtree	N, C, S	<i>Wisteria sinensis</i>	Chinese wisteria	N, C
			<i>Xanthosoma sagittifolium</i>	arrowleaf elephant's ear	N, C, S